

PYRAMIDEN — AFTERLIFE

SPORADIC REVITALISATION STRATEGY

Master's Thesis work, Aalto School of Art, Design and Architecture

2014-2016

PYRAMIDEN

AFTERLIFE

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MSc Thesis, Aalto School of Arts, Design and Architecture

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ABSTRACT

The goal of this project is to challenge the problematic of preservation and revitalisation through the example of Pyramiden, a remote abandoned settlement located in the Norwegian Svalbard archipelago. The framework of the project is determined by complexity of the site. The geopolitical context of Svalbard, history of Pyramiden, ecological situation, economic factors of energy and mineral industries are all aspects that raise questions of the sustainability and expediency of regenerating existing towns, issues of heritage and protection of artifacts from decay and natural risks as well as reuse. Due the dramatic rise of tourism and growing share in a post-industrial economy related to questionable practices revolving around coal mining, the island receives more and more visitors each year and can no longer remain an abandoned ghost town. Therefore the project focuses on the immediate future of the Pyramiden's afterlife.

Background research on the conditions and possibilities of Pyramiden and the surrounding region has led to the idea of Dynamic or Sporadic Revitalisation. Instead of renovating and revitalising the town for new full time / permanent productive functioning, the project approach is to create a growing-shrinking dynamic scenario following the natural yearly cycles of the town. The problem is to implement new functions with consideration of location, cultural qualities, desolation and remoteness.

The proposed strategy for next several years includes the creation of events through an international festival that is the seasonal highlight with peak activity. The creative method and main function for Sporadic Revitalisation lies in the performance arts, particularly experimental theatre productions. Thus the afterlife of Pyramiden takes the shape of theatre performances, appearing for just a short period and existing extremely intensively in immediate reflection of the local specificity of Pyramiden. The festival goal is to attract visitors, promote awareness of regional issues impacting contemporary Arctic problems in the form of art and particularly live experience. The final part of the work includes the design proposal for a flexible-use building that functions with different scenarios depending on the season - from hosting theatre performances during the yearly international festival to shrinking down to a compact working and hosting station during the dark winter season.

The Sporadic Revitalization approach to the abandoned town creates opportunities for the development other settlements on Svalbard, while at the same time preserving a unique and complex experience in the current and rapidly changing context.

The Thesis contributes to contemporary discourse on promoting awareness in the border areas and the Arctic region through the creation of cultural interactions and coexistences. It uses architectural thinking as a tool for scenario planning and framework for addressing the future of an abandoned company town.

Keywords: Arctic, Svalbard, Performance space, Design strategy, Revitalisation

PROJECT STRUCTURE

The Thesis consists of three parts.

I. Background research determined by data gathering and analysis performed remotely provides the project framework consisting of information describing the geo-political, social and natural context of Svalbard and specifics of Pyramiden. The complexity of given facts were decisive in the choice of Pyramiden as the project site

II. The project strategy was to explore the feasibility of the Festival organisation and it's place in the local and regional context.

III. Design speculation focused on the architectural proposal for a building that would host the necessary spaces determined by the background research and project strategy. A new type of performance space that is based on black box theatre yet incorporates the local scenography of Pyramiden into the spaces of performance is proposed. The function of the spaces can change, expanding to become a visitors centre or shrinking down to a mini research hosting base in the winter.

ADVISERS / DISCUSSIONS/ INTERVIEWS

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01 CONTEXT

Background research

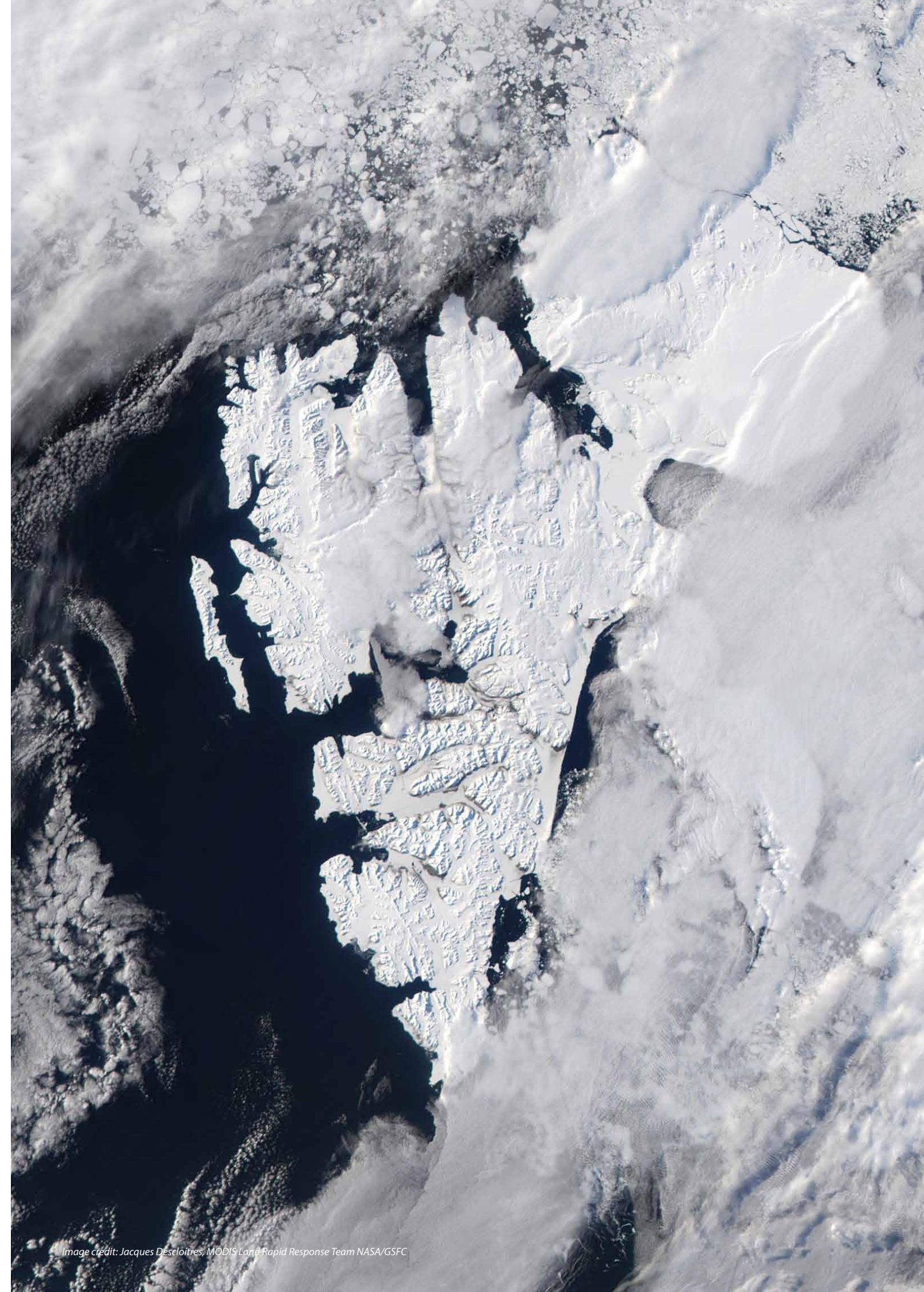
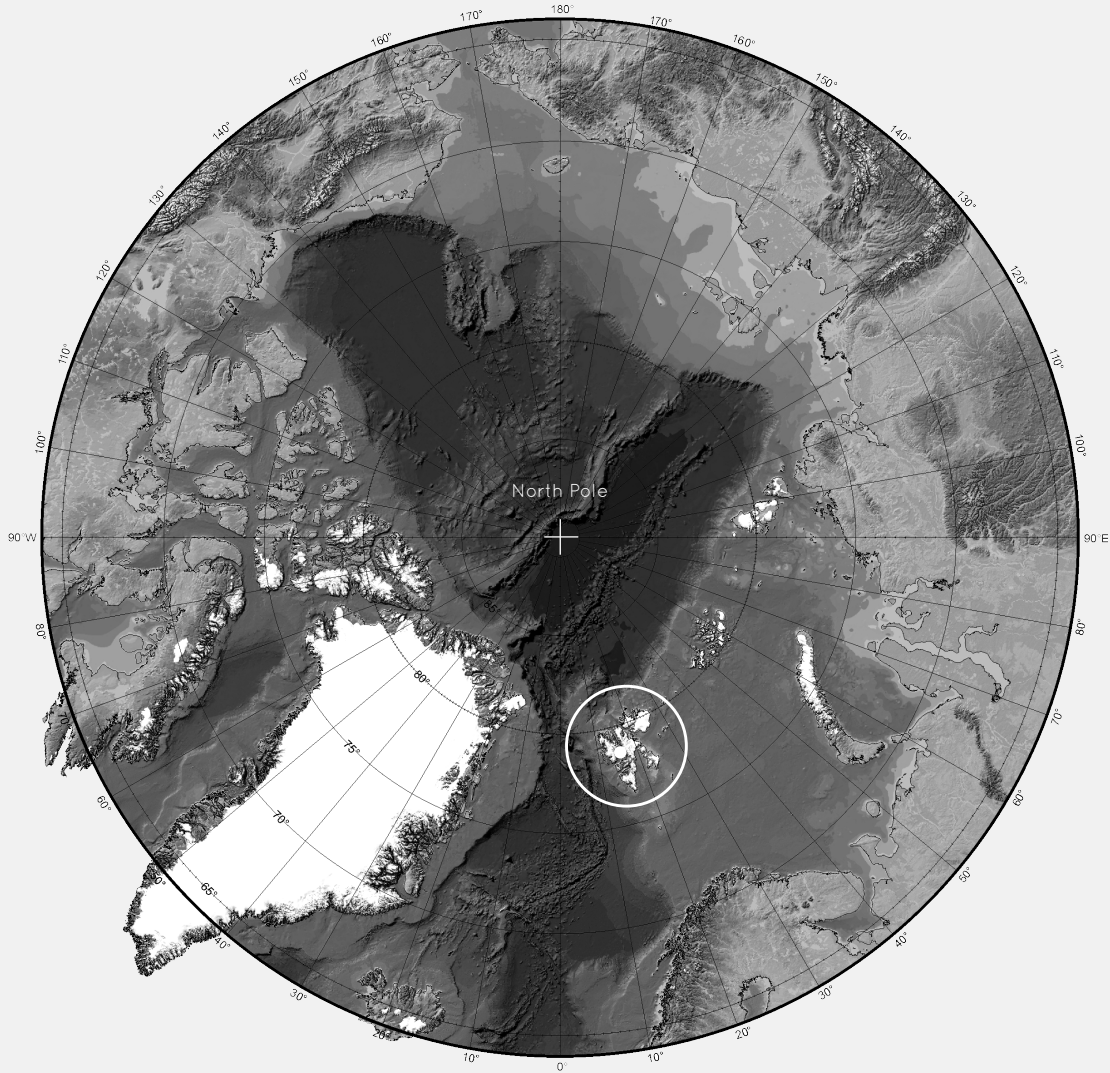


Image crédit: Jacques Descloitres, MODIS Land Rapid Response Team NASA/GSFC

LOCATION

78°41' N 16°24' E
Pyramiden, Svalbard, Norway

The idea of the project has started from the site. Pyramiden is the former Soviet coal town in Svalbard, abandoned in 1998. Historical and geopolitical context makes the place a unique complex entity of arctic landscape and the postsoviet man-made artefact's in urban scale. The town with the peak population of more than 1000 residents living and working in harsh Arctic's weather conditions was the representation of the communist avant-garde in the Western world. After the mine was shut down almost 20 years, the town has been in decay. Only recently it has started to become a point of interest. The place has its very specific character within its socio-geographical and historical context, which turns the abandoned town into perfect scenery for artistic experiments.



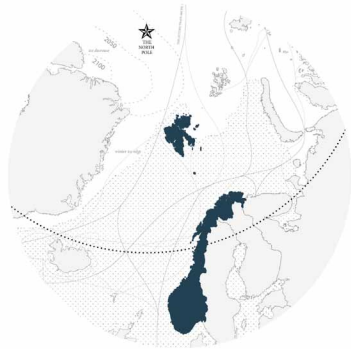
Location of Pyramiden and Svalbard archipelago on the Arctic's map

Bathymetry map, image source: www.ngdc.noaa.gov

SVALBARD

In order to understand the wider context of the region here are presented background data on Svalbard.

The Svalbard Islands are located in the Arctic Ocean, halfway between Norway and the North Pole. The archipelago is governed by Norway and regulated by the Svalbard Treaty. The largest islands is Spitsbergen, where there are several settlements and Longyearbyen is the Norwegian administrative centre. There is no road connection between the settlements.



Map of Norway and the Arctic circle

MAIN SETTLEMENTS

TOTAL POPULATION (2015)

2667

- 2 189 total in Norwegian settlements
- 468 Russian settlements (Barentsburg)
- 10 Polish settlement



BARENTSBURG
permanent population:
468

Former Dutch mining town since 1932 owned and operated by Arktikugol Trust (the Russian state-owned company). Remaining it's mining function, it is in a big share economically dependent on the russian mainland. The town has big potential due to its ice-free harbour. Touristic infrastructure just recently has started to emerge, but still has a long way to go.



LONGYEARBYEN
permanent population:
2075

Administrative centre of Svalbard. Longyearbyen has changed from being company town of Norwegian Store Norske Spitsbergen Kulkompani into a community centre where tourism and science have gained central roles.



NY-ÅLESUND
population Winter/Summer:
30/120

The research company town. It is owned and operated by Kings Bay (Ministry of Trade and Industry of Norway), who provide facilities for permanent research institutes from 10 countries. It is the northernmost civilian settlement in the world



BJØRNØYA
Meteorological station

SVEAGRUVA
Coal mine

Around 300 workers living in Longyearbyen commute to Sveagruva for work on a daily or weekly basis



PYRAMIDEN
population Winter/Summer:
3/10

Russian settlement and coal mining community founded by Sweden in 1910. Since 1927 operated by Soviet Union/ Russia. Pyramiden was closed in 1998 and has remained largely abandoned with most of its infrastructure and buildings. Since 2010s touristic interest increased yearly and at the moment there are even functioning hotels



HORNSUND
population:
10
Polish Polar Station
Research station
operated since 1957

HOPEN
Meteorological station



TRANSPORT



FACTS

JURISDICTION	Norway is a member state of the EEA Agreement. Svalbard is kept outside the terms of this cooperation. Foreign citizens do not need a visa or a work or residence permit from Norwegian authorities in order to settle in Svalbard.
BORDERS	Since February of 2011 all travellers arriving to Svalbard must undertake passport and security check. From mainland - in airports of Tromsø or Oslo.
MONEY	The official currency is Norwegian Krona, NOK However inside the Arktikugol properties the special currency and card are used
WORKING	Any person residing on Svalbard must have sufficient economic resources to finance their stay, or must be able to make a living by legal means. You may be expelled from the country or refused entry into Svalbard if this is not the case
TAXES	Svalbard is considered a special taxation area, with its own taxation laws and legislation. All taxes collected on Svalbard are used explicitly within the archipelago.
LIVING	Most houses and apartments are owned by companies and institutions that provide them to their employees as part of the work relationship. In general, housing and living expenses in Norway and Svalbard are among the highest in the world

INTERNATIONAL POPULATION

A total of 1 661 of those in the Norwegian settlements had a background from mainland Norway, and these constituted 65 per cent of the total population.

In 2015 the share of foreigners in the Norwegian settlements reached 25%

As of 1 July 2014, people from 44 countries were living in Longyearbyen and Ny-Ålesund. The majority of the foreigners; 289 persons, had a background from European countries, with 95 Swedes making up the largest group. A total of 139 persons were from Asia; 107 of them Thais. Seventeen persons had come from as far afield as South America, six were from North America and five were from Australia.

SVALBARD SPECIAL JURISDICTION

The Svalbard Treaty was signed in Paris on 9 February 1920 and gives Norway sovereignty over Svalbard archipelago (all islands between latitudes 74° and 81° north and longitudes 10° and 35° east), while at the same time providing for certain rights for the 40 treaty signatories.

Citizens and companies from all treaty nations enjoy the same right of access to and residence in Svalbard. Right to fish, hunt or undertake any kind of maritime, industrial, mining or trade activity are granted to them all on equal terms. All activity is subject to the legislation adopted by Norwegian authorities, but there may be no preferential treatment on the basis of nationality. Norway is required to protect Svalbard's natural environment and to ensure that no fortresses or naval bases are established. 39 countries are currently registered as parties to the Svalbard treaty.¹

#1
The District Governor of Svalbard (Sysselmannen) is the government's chief representative on the archipelago. The district governor's authority reaches across the archipelago and within Norwegian territorial waters out to a distance of 12 nautical miles

#2
Norwegian criminal law is applicable on Svalbard, and the District Governor of Svalbard is the chief of police for the archipelago

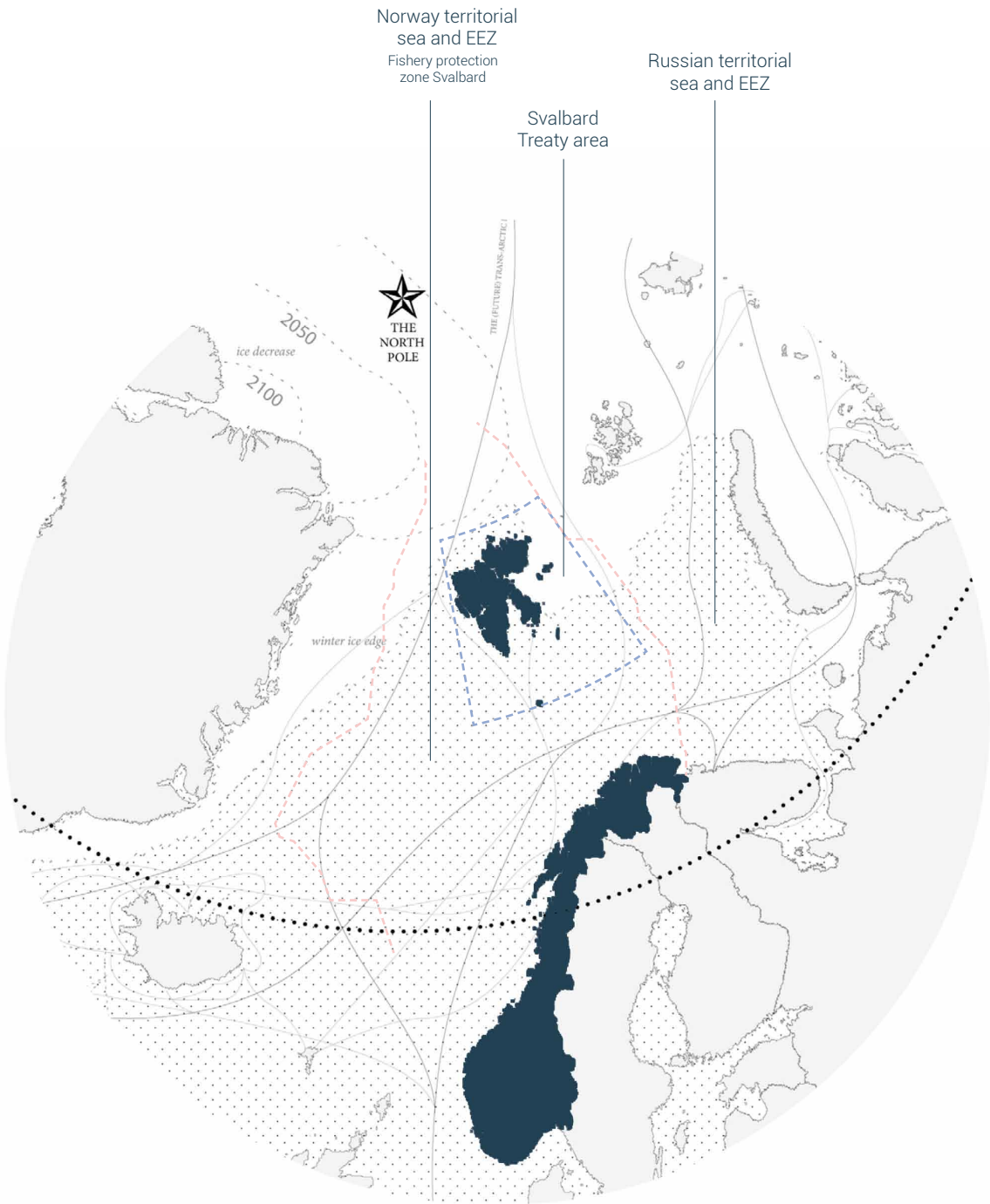
#3
The Longyearbyen Local Municipal Council is responsible for infrastructures, social and community planning, land-use planning, day-care programs, schools and child welfare agencies. In contrast to mainland municipal councils, Longyearbyen's local government is also responsible for the administration of energy production. Longyearbyen's local council does not collect municipal taxes and has no responsibility for basic health care services.

#4
A person who is not a Norwegian citizen but who has been listed in the Population Register of Svalbard as residing in Longyearbyen or has been listed in the National Population Register during last 3 years has right to vote. An experiment will be carried out that involves reducing the voting age to 16 years of age for the Svalbard local municipal council elections of 2011

#5
Residence and working in Svalbard does not give any rights to Norwegian citizenship or work permit in mainland

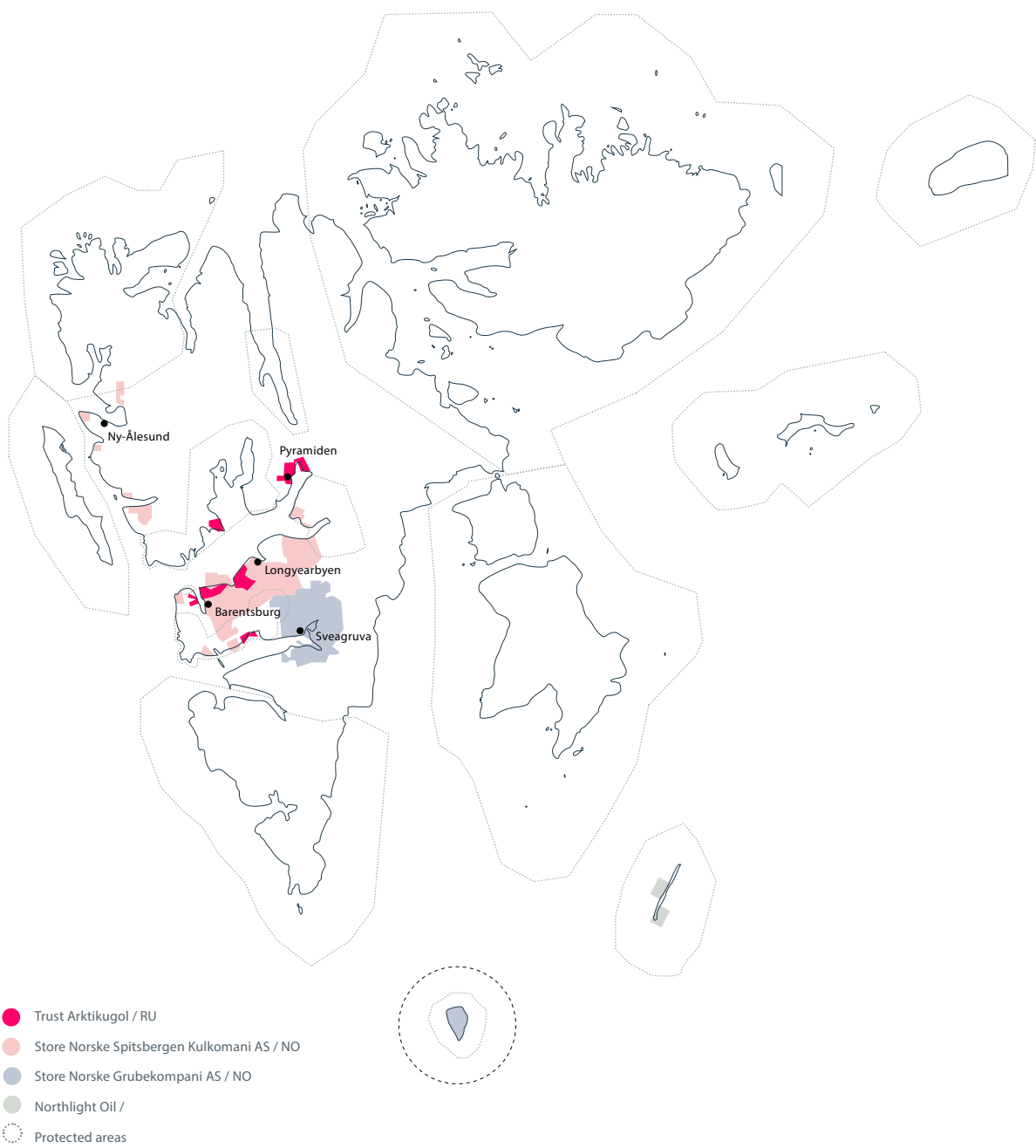
1. Source: Treaty between Norway, The United States of America, Denmark, France, Italy, Japan, the Netherlands, Great Britain and Ireland and the British overseas Dominions and Sweden concerning Spitsbergen signed in Paris 9th February 1920.

2. Source: Governor of Svalbard

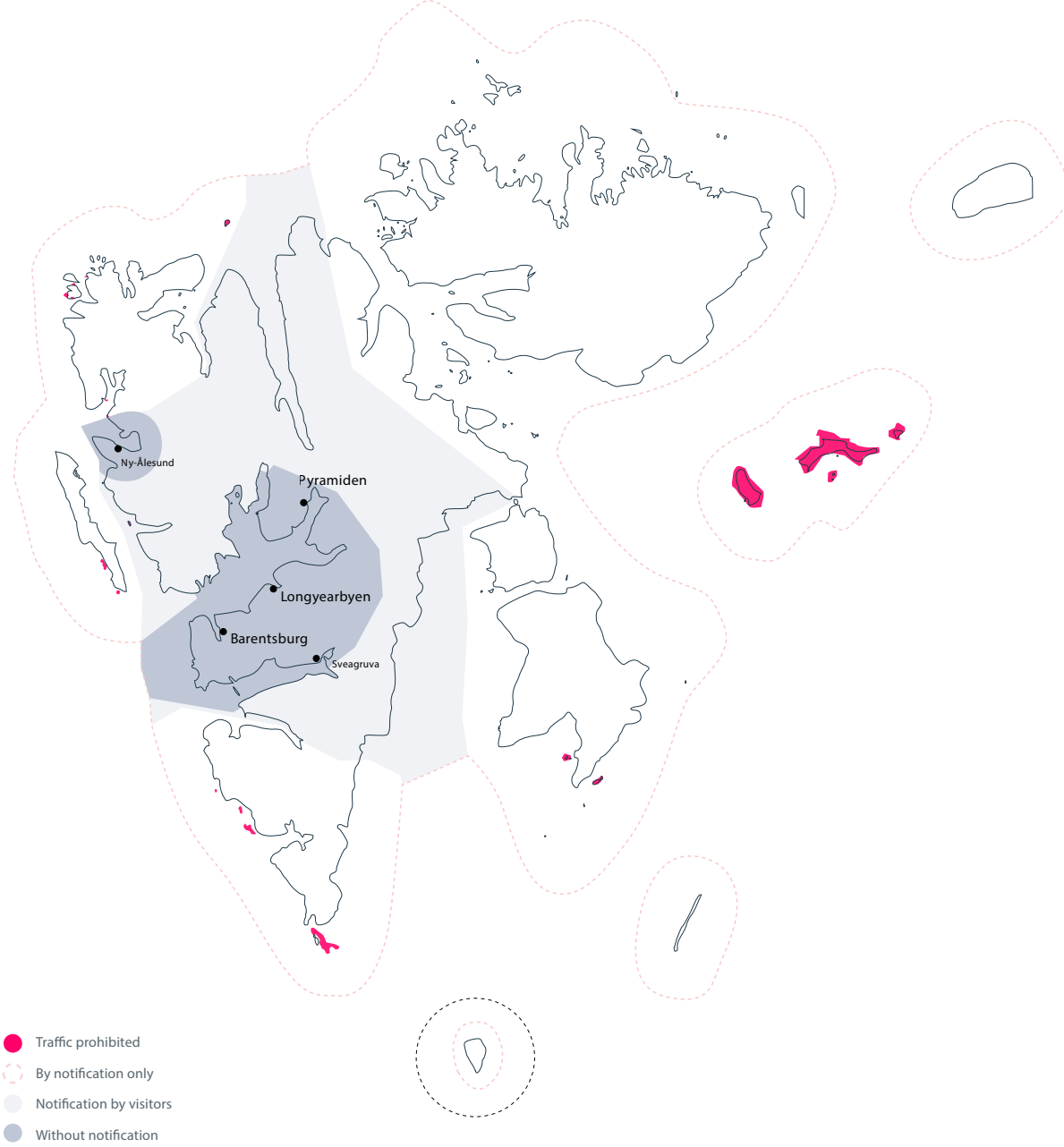


Source: International Boundaries Research Unit, www.durham.ac.uk/ibru

CLAIMS



RESTRICTIONS



Ban on the heavy fuel oil
Vessels entering protected areas are required to carry DMA-grade fuels, in accordance with ISO 8217 Fuel Standard
The entire eastern part of archipelago is under protection. Vessels max 200 passengers only



Friendship match between Longyearbyen and Pyramiden
Image: Svalbard Museum's Photo Library

COEXISTENCE

INTERNATIONAL COEXISTENCE

An important difference in Svalbard's cultural landscape is the absence of indigenous population. The entire history of the settlements has been in a big share based on activities based on temporary living - whether it was whale hunting, coal mining or research expeditions. While on the mainland, in northern Norway, Finland and Russia the arctic identity today is mostly referencing to indigenous cultures with all the related mixtures and influences. Historically the archipelago was visited and used by different countries, so for long periods it had the status of no-one's land. Today, according to the Svalbard Treaty of 1920, it has been established as part of Norway, however on special conditions. The treaty provides equal rights for residence and economical activity for all of the countries who have signed the treaty. Today Svalbard is an unincorporated area of Norway administered by a state-appointed governor, a free economic zone and a demilitarized zone. Evidently that fact was a good foundation for setting the archipelago as a multicultural shared land with wide perspectives of collaboration and cultural interchange.

However, due to the later events, it turned out to become mostly a bicultural and even bipolar strategic spot. The Soviet presence in the Western block beyond the polar circle made this spot strategically important.

During the years of cold war the coexistence and communication happened on all levels - from diplomacy missions and the building of a shared airport to friendship sport games between soviet and norwegian communities - all this shaped the everyday life and cultural identity of Svalbard during the post-war years.

IMAGE OF SVALBARD

In the field of Norwegian perception Svalbard does not belong to neither one of Norway's many cultural entities. But both historically and geographically it has closest ties to Northern Norway. This area is historically closely connected to Sami culture, fishing industry and historical trade-connections with Russia (pomors).

Norwegian contemporary culture on Svalbard today is mostly represented in Longyearbyen - most visible by traditional wooden buildings, cuisine and arctic lifestyle. The laws, regulations and the biggest part of the economy is also norwegian. From this point of view the modern cultural context of the island appears to be, in lions share, norwegian, in a way of looks and functions.

At the same time the post-soviet settlements and infrastructure that first seems to be foreign elements for the moment is a natural part of the cultural landscape. However the visual representation of Pyramiden (as well as Barentsburg) has very specific features

CLIMATE

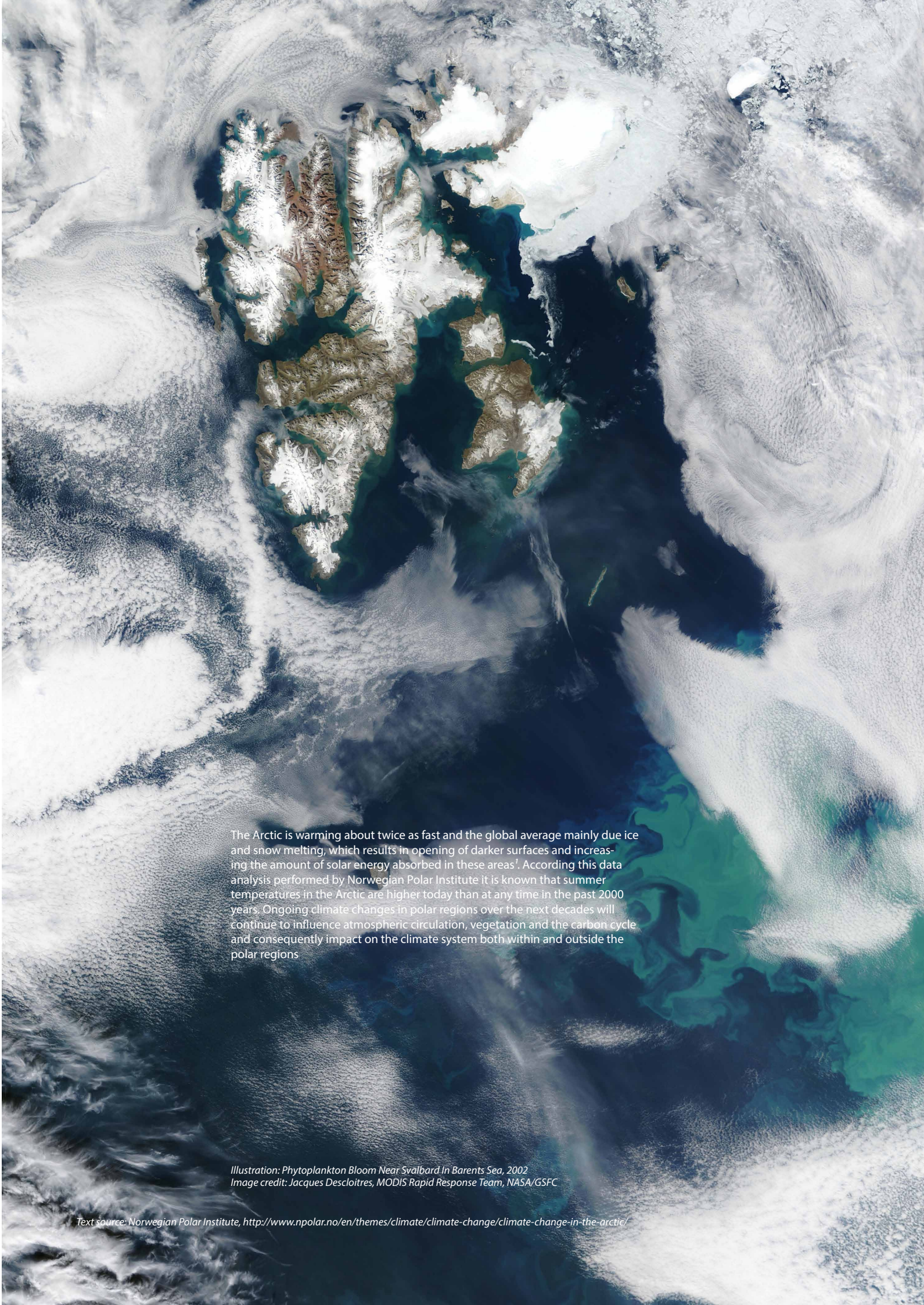
Svalbard is situated north of Norway, between the Barents and Greenland Seas, right on the edge of the Arctic Circle. The latitude of Svalbard, between 74° and 81° north, makes it an extreme polar area. However, the warm North Atlantic Current makes the climate on Svalbard milder than in other areas at the same latitude, particularly during winter, giving it up to 20 °C higher winter temperature than similar latitudes in continental Russia and Canada. This keeps the surrounding waters navigable most of the year. The fjords and sea areas north and east of Svalbard are covered with ice for 8–9 months of the year, while the fjords on the west side of Spitsbergen can be ice-free for large parts of the winter.

Average July temperatures range from 3 and 7 °C , and in January temperatures are normally between –13 and –20 °C!. The interior fjord areas and valleys, sheltered by the mountains, have less temperature differences than the coast, giving about 2 °C lower summer temperatures and 3 °C higher winter temperatures

The archipelago is the meeting place for cold polar air from the north and mild, wet sea air from the south, creating low pressure, changing weather and fast winds, particularly in winter. Fog is a typical summer phenomenon, but most frequent in the coastal areas. Precipitation is frequent, but falls in small quantities, typically less than 400 millimeters (15.7 in) in Western Spitsbergen. The majority of rainfall on Svalbard comes with polar eastern winds from the Barents Sea, and there is three times as much rainfall on the south coast of Spitsbergen as in the area surrounding Pyramiden. Svalbard has a permafrost layer that goes down to 450 metres. During the summer, only the upper layer of the soil defrosts, down to a maximum of one metre.

Svalbard has seven national parks, six large nature reserves, 15 bird sanctuaries and one geotopic protected area. Over half of the land area is protected.

Source: 1. "Temperaturnormaler for Spitsbergen i perioden 1961 - 1990" (in Norwegian). Norwegian Meteorological Institute
2. Statistics of Norway, <https://www.ssb.no/en/svalbard/nokkeltall/svalbard-en>

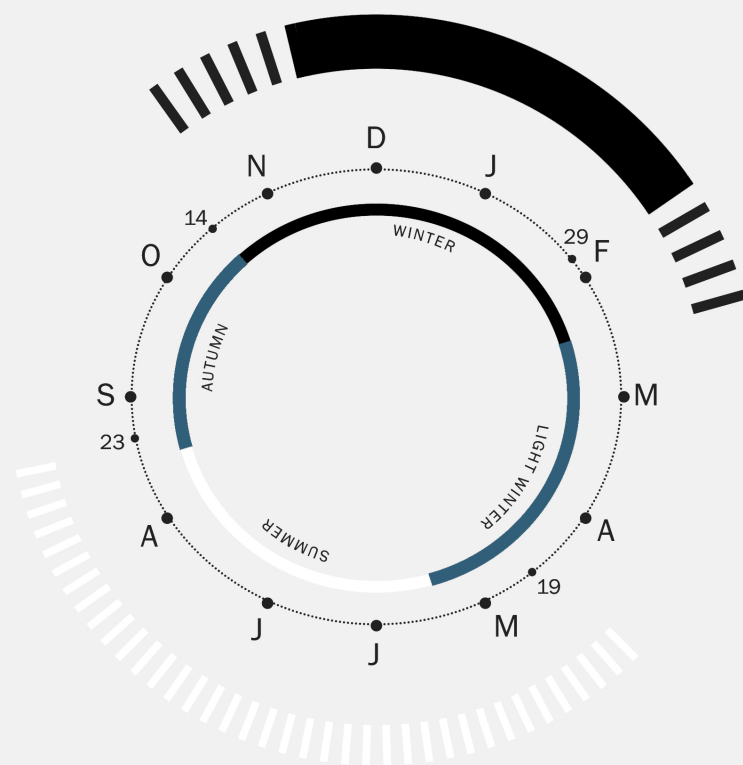


The Arctic is warming about twice as fast and the global average mainly due ice and snow melting, which results in opening of darker surfaces and increasing the amount of solar energy absorbed in these areas!. According this data analysis performed by Norwegian Polar Institute it is known that summer temperatures in the Arctic are higher today than at any time in the past 2000 years. Ongoing climate changes in polar regions over the next decades will continue to influence atmospheric circulation, vegetation and the carbon cycle and consequently impact on the climate system both within and outside the polar regions

Illustration: Phytoplankton Bloom Near Svalbard In Barents Sea, 2002
Image credit: Jacques Descloitres, MODIS Rapid Response Team, NASA/GSFC

Text source: Norwegian Polar Institute, <http://www.npolar.no/en/themes/climate/climate-change/climate-change-in-the-arctic/>

SEASONS



Season change is very strong on Spitsbergen what dramatically effects way of living

MIDNIGHT SUN
19 April to 23 August

POLAR NIGHT
27 October to 14 February

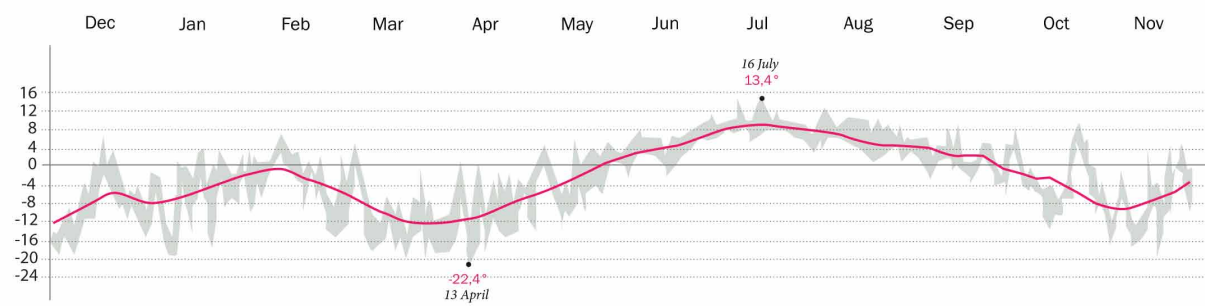
Civil polar night duration
76 days (14.11 to 29.01)

NB. data for Longyearbyen
Source: Norwegian Meteorological Institute and Norwegian Broadcasting Corporation www.yr.no



Northern lights safari during the Polar night
photo by Marcela Cardenas

CLIMATE



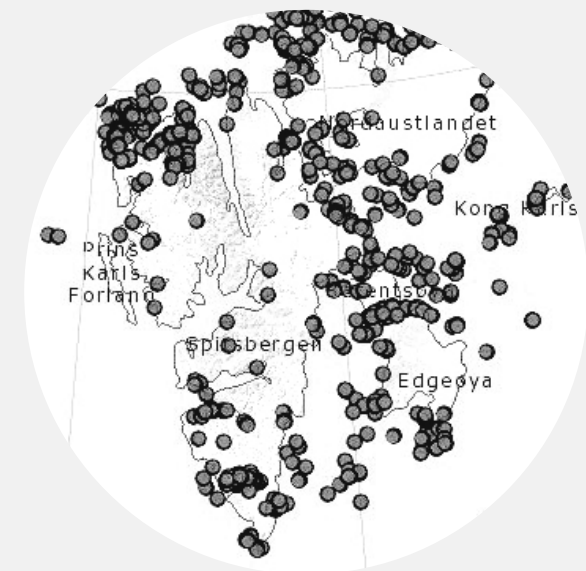
AIR TEMPERATURES

Pyramiden weather station,
December 2013 - November 2014

SEA TEMPERATURES

1st December 2014

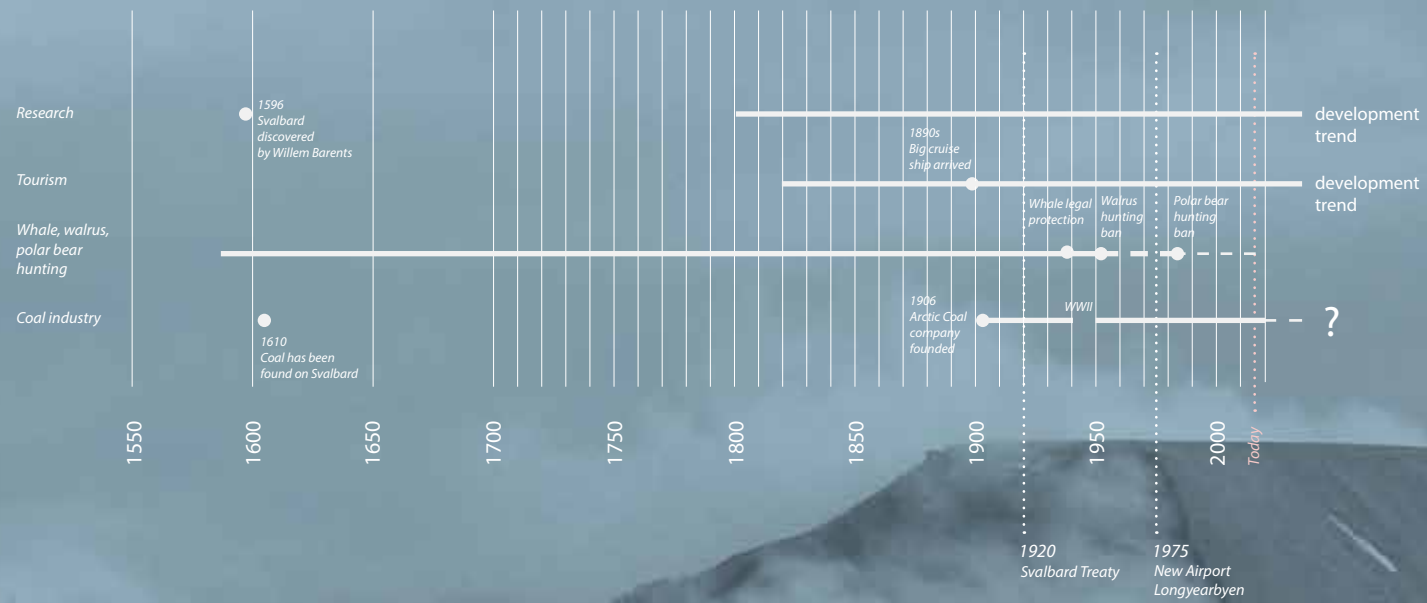
West coast $+6^\circ$
East coast 0°



Distribution of bears within the area

INDUSTRY

SVALBARD ARCHIPELAGO ACTIVITY TIMELINE



What is going to be after coal mining?

MINING



Recent development in global coal prices has led to a big decrease in the activities of Store Norske Kullkompani, the only norwegian coal company in the region, owned 99 % by the norwegian state. The norwegian state has guaranteed to keep the Svea mines of the company open, but not producing, for three more years, until the end of 2018. The result is that the company goes from 250 employers to down to 100¹. In reality this is a message to the company that it will have to prepare for the end. For the local community this is a hard blow, since much of the economic activity on Spitsbergen is connected to the coal industry, directly or indirectly.

The Arctic region is increasingly interesting from many perspectives on different geographical levels. Exploitation of natural resources such as fish, minerals, oil and gas has over the last decades put the Arctic region in focus since the global warming increases the accessibility to the Arctic but also due to the fact that the region is rich of unexploited natural resources. This development can be challenging from an environmental perspective.



1. Store Norske, Official website www.snsk.no/

PYRAMIDEN

From the moment of its foundation the strategic location of Pyramiden has played a significant role. Today Svalbard retains its importance for all the participants of The Svalbard Treaty but most evidently for Norway and Russia. The rising share of tourism and scientific research in the economy of the region together with environmental concerns related to the coal mining has strengthened the need to reevaluate the presence of the coal industry on the archipelago. The issue of company-town revitalisation will therefore stay actual for years.

However Pyramiden happens to be placed in a certain historico-cultural and geographical context that has turned it into something more than just another mining commune. Its prehistory as a Soviet window to the West, the location on the island, the active harbour, the existing infrastructure and the presence of large coal resources offers an attractive foundation for speculations on its development in various future scenarios.

HISTORICAL BACKGROUND

Pyramiden has always been a project run by both economical and political reasons.

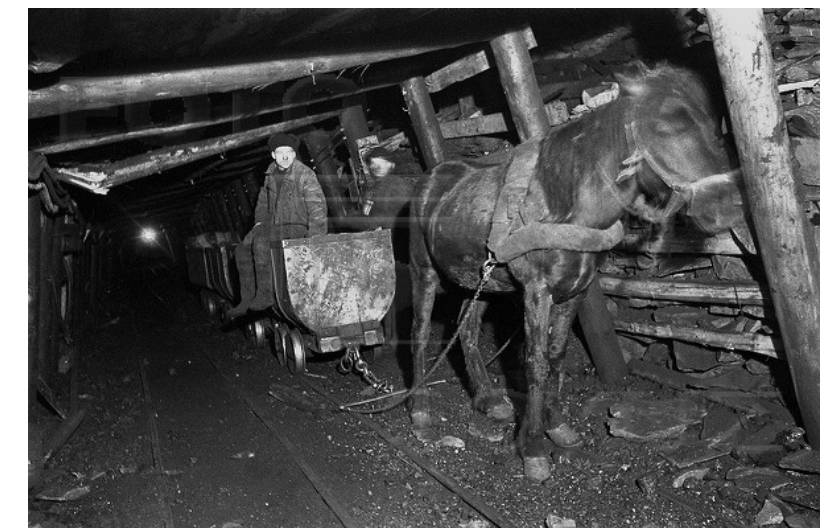
It was first established in 1910 by the Swedish iron and steel company Jernkontoret, that had started exploration and mining activity there. Already by then Spitsbergen was area with many overlapping claims and interests. Swedish steel and coal industry had an ambition to secure the coal claims on Svalbard, Swedish polar scientists aimed to develop research fields (establish research stations) and the Swedish foreign ministry had an interest in preventing Norwegian sovereignty on Spitsbergen¹. In 1921 the new company AB Spitsbergens Svenska Kolfält launched both the small scale mine in Pyramiden and the Svea mine, which now belongs to the Norwegian company Store Norske².

During the early 1920 the coal market price fell. The signing of The Svalbard Treaty caused a reorganisation of the many overlapping international claims, and as a result Pyramiden were sold to the Russian Grumant company in 1927, which in 1932 became Trust Arktikugol company. All together Arktikugol ran mines in 4 different settlements and improved the Russian presence on Spitsbergen. Obviously due to strategic reasons the Soviet Union had a high priority on expanding its developments extensively in the Arctic and particularly on Spitsbergen in this period.

The Pyramiden mine re-opened in 1934 and was developed continuously until the evacuation in 1940 caused by World War II. The coal production was reopened already in 1945 and the settlement started a rapidly expanding development. The reconstruction of the Russian mining towns was conducted very efficiently and with great force. In 1950 Trust Arktikugol sent 1712 workers and 28 000 tons of equipment and building materials from the mainland to Pyramiden. The main purpose was to produce and ship coal supplies to Murmansk and Archangelsk region and from there by railroads to the other parts of USSR³.

During the 1970s and 1980s Pyramiden became a large scale and very well maintained mine commune, the biggest in Svalbard reaching a peak population of 1100 people. Due to the relatively large population, the climate conditions and the remote location, both the social and technical infrastructure was an important part of the development and it made Pyramiden a cultural and sport highlight of the region, offering good conditions for workers and their families.

In 1998 Trust Arktikugol closed down the operations due to economical reasons. Almost overnight all citizens of Pyramiden were returned to the mainland with only their personal belongings and all the houses with furniture and equipment were left for good.



Pyramiden mine, photo by Evzerikhin Emmanuil (b.1911), private archive, Moscow

1. Avango, Solnes, Registrering av kulturminner i Pyramiden, 2013, p. 4

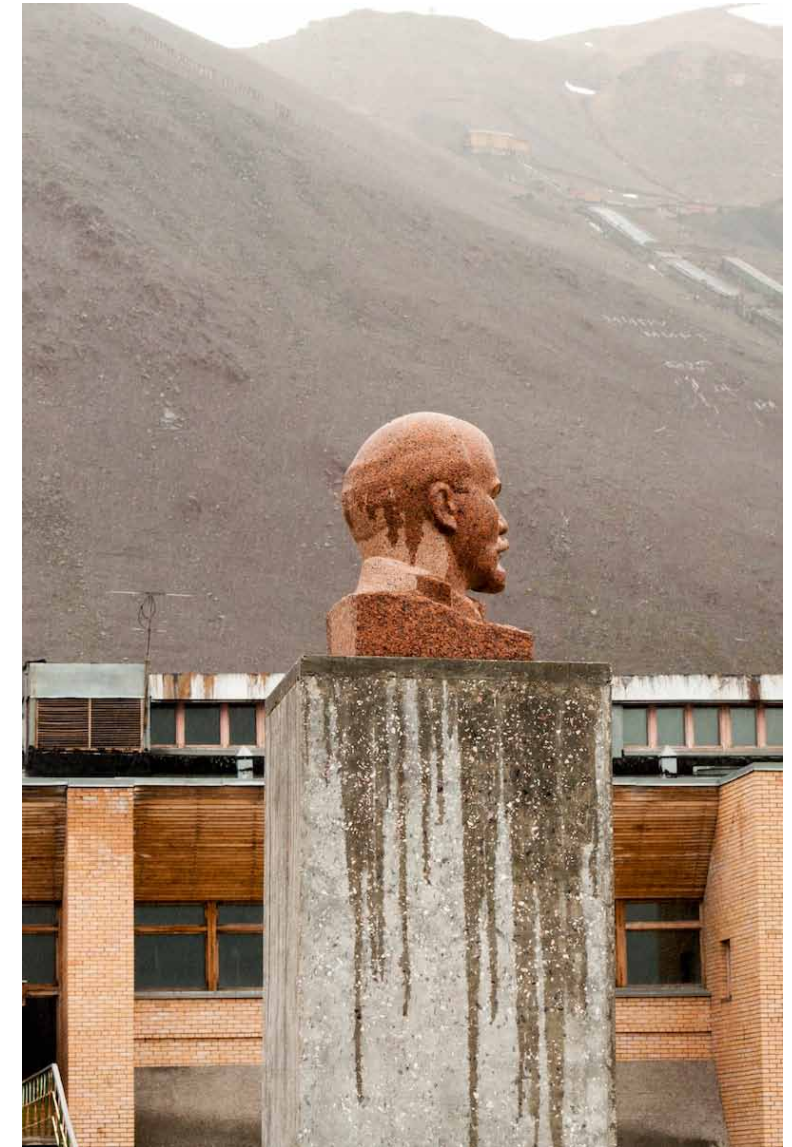
2. Store Norske official website, www.snsk.no

3. Arealplan For Pyramiden, planning proposal report, by LPO Architects, 2014

AREAL VIEW



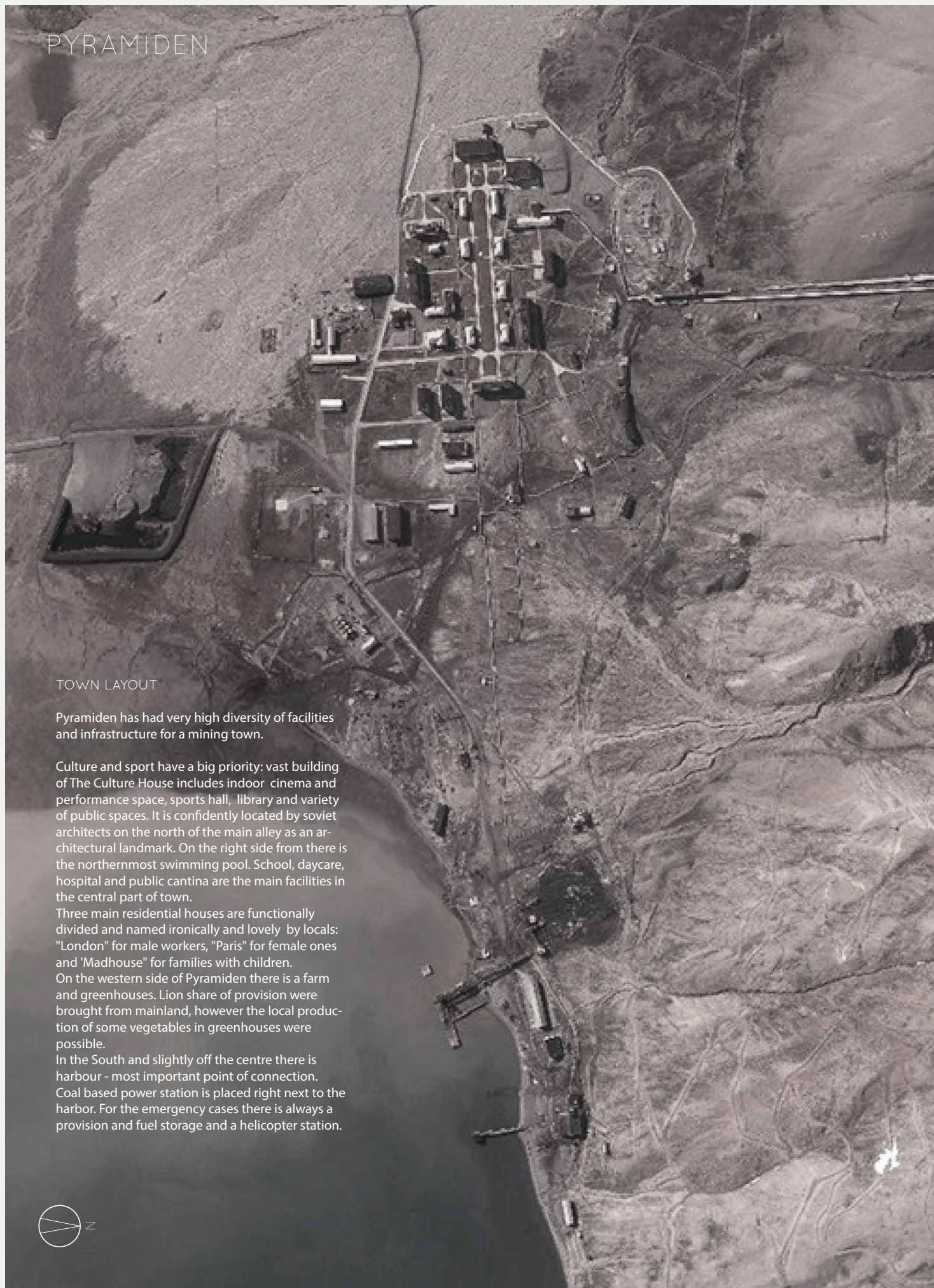
PYRAMIDEN



Images courtesy: both Sergey Dolya

Images courtesy: on top: Sandra van Egmond , below: Sergey Dolya

PYRAMIDEN



TOWN LAYOUT

Pyramiden has had very high diversity of facilities and infrastructure for a mining town.

Culture and sport have a big priority: vast building of The Culture House includes indoor cinema and performance space, sports hall, library and variety of public spaces. It is confidently located by soviet architects on the north of the main alley as an architectural landmark. On the right side from there is the northernmost swimming pool. School, daycare, hospital and public cantina are the main facilities in the central part of town.

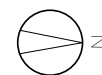
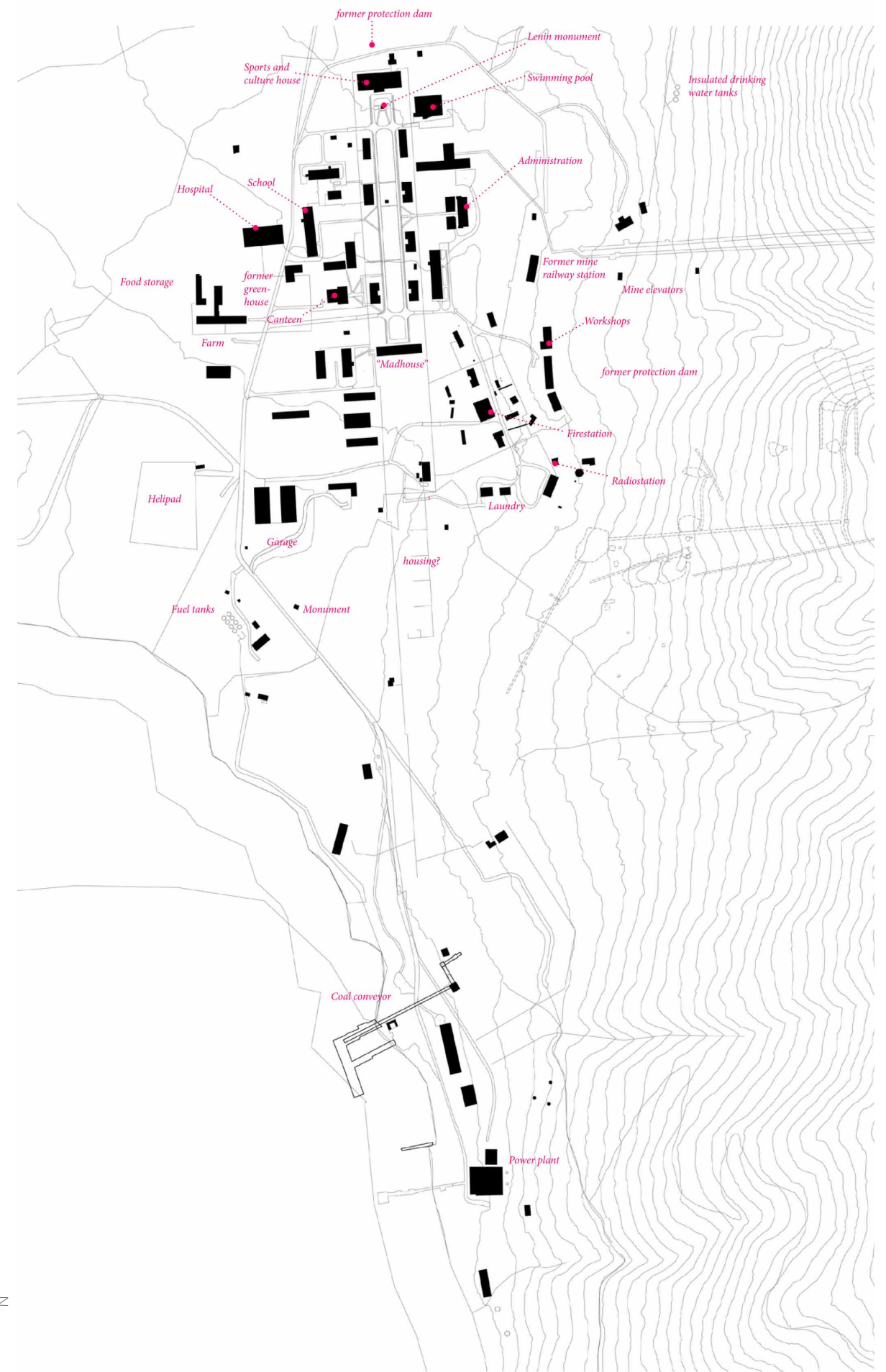
Three main residential houses are functionally divided and named ironically and lovely by locals: "London" for male workers, "Paris" for female ones and "Madhouse" for families with children.

On the western side of Pyramiden there is a farm and greenhouses. Lion share of provision were brought from mainland, however the local production of some vegetables in greenhouses were possible.

In the South and slightly off the centre there is harbour - most important point of connection. Coal based power station is placed right next to the harbor. For the emergency cases there is always a provision and fuel storage and a helicopter station.



TOWN LAYOUT



ARCTIC PARADISE

The development of Pyramiden became in some sense a showcase of the communist utopia. The cold war conditions sharpened the need to have a representative socialistic community town with high living standards, that could be a vitrine for western people. A job and residence in Pyramiden was considered a great luck and ticket to "a better life" by the soviet citizens and it attracted people with the best qualifications from all over the Soviet Union.

At its largest, in the 1980s, Pyramiden had over thousand inhabitants. The coal based power plant produced an excess of hot water that were channeled through pipelines to the city. It covered the needs for heating and hot water for all the houses and apartments and the saltwater swimming pool. A farm producing milk, meat and eggs was heated in the same way. Waste from the animal farm were used to fertilise the soil in greenhouses. There the locals grew cucumbers, parsley, tomatoes, scallions, chives, lettuce, paprika and decorative plants, about 1000 km. from the North Pole.

The production of electricity from coal provided yet another by-product: large amounts of mineral ash that was used for producing local bricks. A large part of the buildings from the later developments in the city were built from these bricks. In many senses it reflected the modernist dream of an autonomous self sustaining city.



CULTURAL HERITAGE

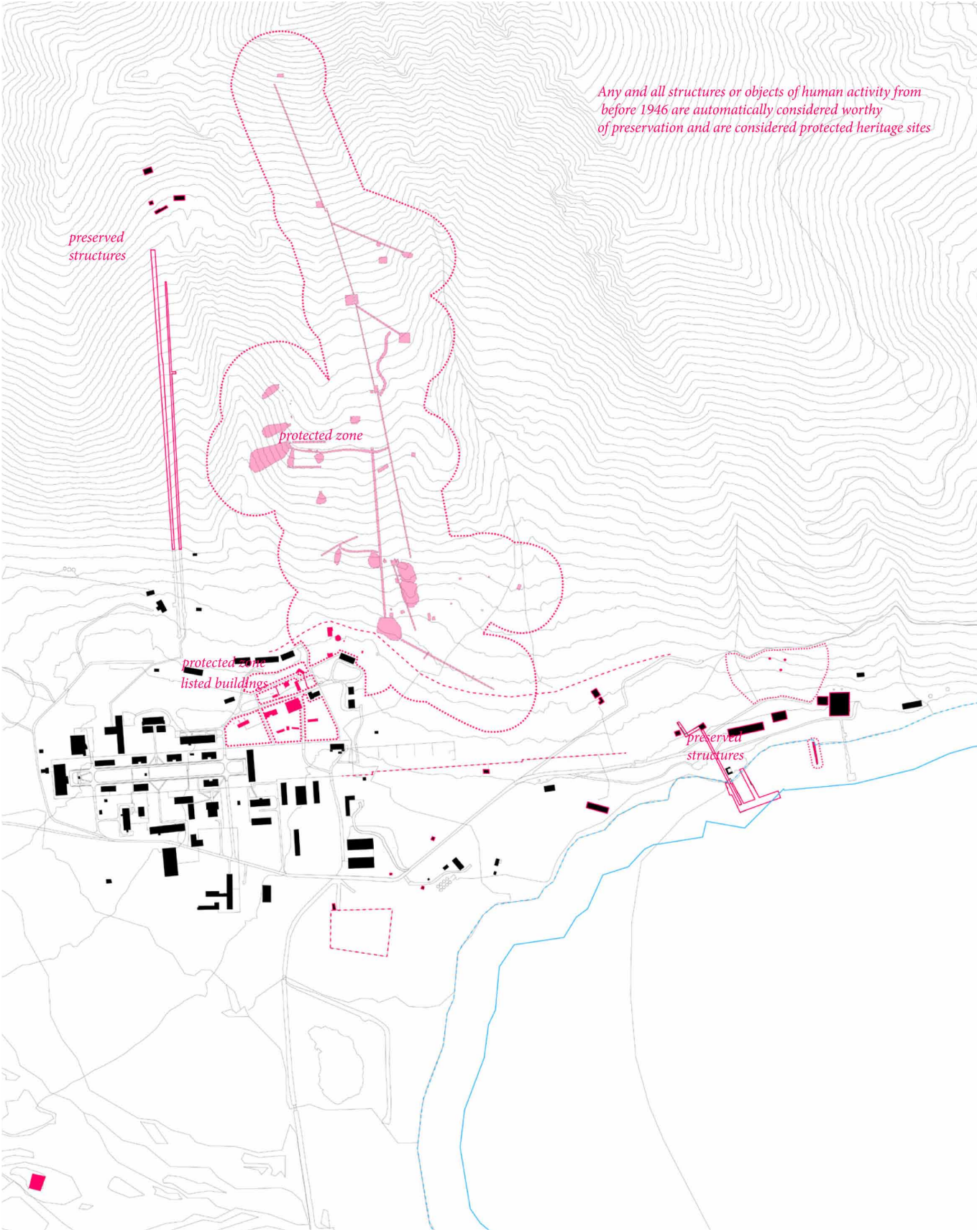
The image of Pyramiden is unique and typical at the same time. The strong soviet aesthetics in exteriors and interiors - concrete architecture, iron installations and loads of socialist iconology. In the same way the spatial outline and the urban planning solutions of the town is rigid and ordered - all buildings are arranged symmetrically along a central axis that completely ignores local topography. There is a strong contrast to for instance the norwegian Longyearbyen, where houses are located terrace-like following the landscape. That makes the town a specific example for studies of the differences in cultural and society organisation.

All the buildings related to the period up until 1946 are automatically listed heritage with a protection zone of 100 m. The cultural heritage after 1946 is not covered by Svalbard Protection Act, but may be considered in terms of protection and conservation through land-use plan¹ Post-war development is mostly in the shape of detached wooden houses that were built with references to Russian national architectural style with fine wooden ornamental details. The brick buildings from the 1970s and 1980s have a strong brutal soviet identity, combining standardized typical design solutions common in various parts of USSR with it's minimal adaptation to the Arctic climate.



Wooden house on the main alley, October's 60th anniversary street before the facade renovation in 2014, photo: Wen Nang

MAP OF PROTECTED AREAS



GHOST TOWN

Pyramiden has a fascination of a ghost town, and even though it has been abandoned almost 2 decades ago, seems as it was only yesterday. The arctic climate prevents materials from decomposition, but power of mountain rivers and rains and frost has its destructive force, after first winter most of the pipe systems were damaged.

After the evacuation, the Pyramiden Hotel was seasonally opened again for couple of years on an improvised basis and only used by the hiking groups. However due to cooperation issues after 20001 it was closed and Pyramiden again become a ghost town except of a small salvaging force, which extracted reusable or saleable (metal scrap) materials during summers.



1. information from the touristic company Terra Polar
terrarpolaris.com

photo by Sergey Dolya, fragment



GHOST TOWN

INTERIORS

Workers that came to live and work in Pyramiden were normally hired on two-year contracts. The contract period was followed either by a free visit home or a long summer holiday for those who signed on or were offered a new contract. During the contract period, the Trust supplied food, housing and working clothes for employees.

Despite the seven years of post-Soviet existence, the town's facade and interiors remains its Soviet identity in monuments and posters. The workers apartments, however, provides a very different impression. Most of the apartments have two rooms: a small front room with a bathroom and a larger sleeping/living room¹. The corridors and stairways of the blocks aesthetically look like public spaces, standardized and humble. However, as one enters the apartments, things change. Despite their spatial uniformity, interiors solution vary a lot.

photo courtesy: Elin Andreassen, cropped

1. Persistent Memories. Pyramiden – a Soviet Mining Town in the High Arctic by Elin Andreassen, Hein B. Bjerck og Bjørnar Olsen, <http://vimudeap.info/en/atlas/pyramiden-piramida-svalbard-spitzbergen/images/#gallery-02408>
2 Ibid



Creative use of wallpaper, floor coverings and paint makes each apartment unique and individual. Plants in pots, soviet DIY furniture, and inventive bookshelves. From cigarette boxes, beer bottle labels and advertisements to pin-ups and air cargo package tape - anything was used for wall decorations². All this makes the interiors of the apartments stand out in astonishing contrast to the boredom of common spaces. People express themselves in their personal spaces to fill the long dark winter times.



photo courtesy: Elin Andreassen (and 2 above)



photo courtesy: Sandra van Egmond



"How does a site like Pyramiden, a decaying Soviet industrial ruin fit into conceptions of heritage and the current political economy of the past?
What are we to do with this embarrassing, rusting and crumbling ghost town situated in the midst of pristine Arctic nature – Europe's last authentic wilderness?
In the dominant conception of heritage and ruins they are old, they have an "age value" which is crucial to their legal and cultural/historical appreciation. Judged by this criterion, Pyramiden becomes ambiguous, even anachronistic; a site out of place – and out of time"

Bjørnar Olsen, researcher, co-author of the book "Persistent Memories" in his interview to Studies of Prehistory (Studii de Preistorie) magazine



TOURISTIC ATTRACTION

However in last couple of years the destination becomes more popular among tourists from Longyearbyen and Trust Arktikugol finally turned head toward touristic industry and gradually started renovating facilities in Pyramiden and Barentsburg¹.

At the moment a small new container base installed in the port is available as accommodation for visitors. Hostel can offer space for 20 people. Since 2013 the Hotel Tulip has opened again seasonally, it can host upto 46 people. Only half of the building is in use, another half is currently in the renovation process². Also the northernmost campsite was installed on the former gravel area behind the hotel.

1. <http://svalbardposten.no>
2. information end of year 2015



What is the afterlife of a ghost town?

02 PROJECT STRATEGY

Sporadic revitalisation
of the ghost town



PROJECT STRATEGY

SPORADIC REVITALISATION APPROACH

Sporadic revitalisation is a form of experimental preservation which proposes limited dynamic use of the abandoned town of Pyramiden. Due to its special inherent features, memories and cultural meaning against the background of growing touristic interest in abandoned Soviet aesthetics, Pyramiden has incredible potential for becoming a new international cultural connection spot. A tourism industry rapidly growing in the area makes the experiment with the cultural functions and the temporary use of the town potentially feasible.

Reducing coal mining activities in the coming years and focusing on environmental issues brings a new agenda to both artists and entrepreneurs and surely the interest of cultural institutions. At the same time the growing population of Svalbard consists mostly of a social group that would be potentially interested in consuming and expressing themselves in culture. Pyramiden has not been utilised for almost two decades and most of the infrastructure necessary for regular living requires vast renovation, therefore the regular cultural function implementation seems to be pretty difficult at least for next several years. In addition the current mode of the town is an open-air museum where a ghost town identity is itself an object of preservation.

However as mentioned before due to many reasons and expected changes, Pyramiden will not remain empty. This project offers a possible scenario for a short term revitalisation based on dynamic use. The site is characterised by specific arctic weather conditions that makes seasons a main factor shaping the local lifestyle. Hence the dynamic depends a lot on the natural cycles and transport accessibility for visitors.

The project does not aim to solve any particular practical problems connected to renovation or conservation, but provides the vision for a different relationship between "hardware" of the legacy of built environment, its location and "software" - the actual stories and life processes happening there. Context - physical, social and unique features of the space and its experience become the object of creative preservation.

DISCOURSE

In recent years the image of the Arctic has transformed from a place of purity and inaccessibility to a place of emergency. Global discourse on issues of climate change has put any topic in relation to Arctic into sharp actuality. Svalbard is the important knot where many international, strategic and economic issues and interests collide. It is a demilitarised zone, but remains an invisible battleground between ambitious countries, commercial interests and the voices of researchers, activists and local citizens. Being sort of a grey zone - EEZ, visa-free and covered by conditions of Svalbard Treaty, Pyramiden offers great opportunities for becoming an important base for international interaction.

However it is also a region with a harsh natural environment that affects human interaction. The thin layer of man-made construction between ice formation and mountains many million years old is the perfect spot for celebrating and creating awareness of the current situation. What could be better than making this abandoned Soviet settlement a location for an international cultural event, turning it into a symbol of this moment in time.

Today, when fossil fuels are a very important part of the economic, social and artistic discourse in the Arctic region, Svalbard has potential to acquire a new image and become an arena of open cultural and research programs. The entire island had lots of prohibited places, which turns it into a sacred place attractive to visitors. Thus raising environmental issues in the shape of cultural communication on an international level could have great social impact. International collaborations and the attraction of creative energy could affect the sustainable development of the region, and be profitable for both the Norwegian and Russian sides of Svalbard as well as other nationalities with interests in Pyramiden.

One way to start such a process is to activate the human resources already existing in the area and to attract new resources. The proposal in this case is to bring people together, across occupations, interests and nationalities, across arts, science and daily life, to bring people together in Pyramiden, a place with such a strong symbolic value, where the past is always there as a memory of what happens to societies who treat their finite resources as infinite. The program of sporadic revitalisation spans several years in the form of Pyramiden Afterlife, proposing a series of events with the Festival of Performing Arts as the main highlight. The architectural framework for the event incorporates partial reuse of selected existing buildings and design of the new performance space with facilities.

Festivals and other sporadic events will require some additional facilities, hence the second part of this project is a design proposal for a new performance space, that offers a site-specific design solution that on the one hand is the flagship of the festival, and on the other hand could have other uses during the year.

PROJECT STRATEGY

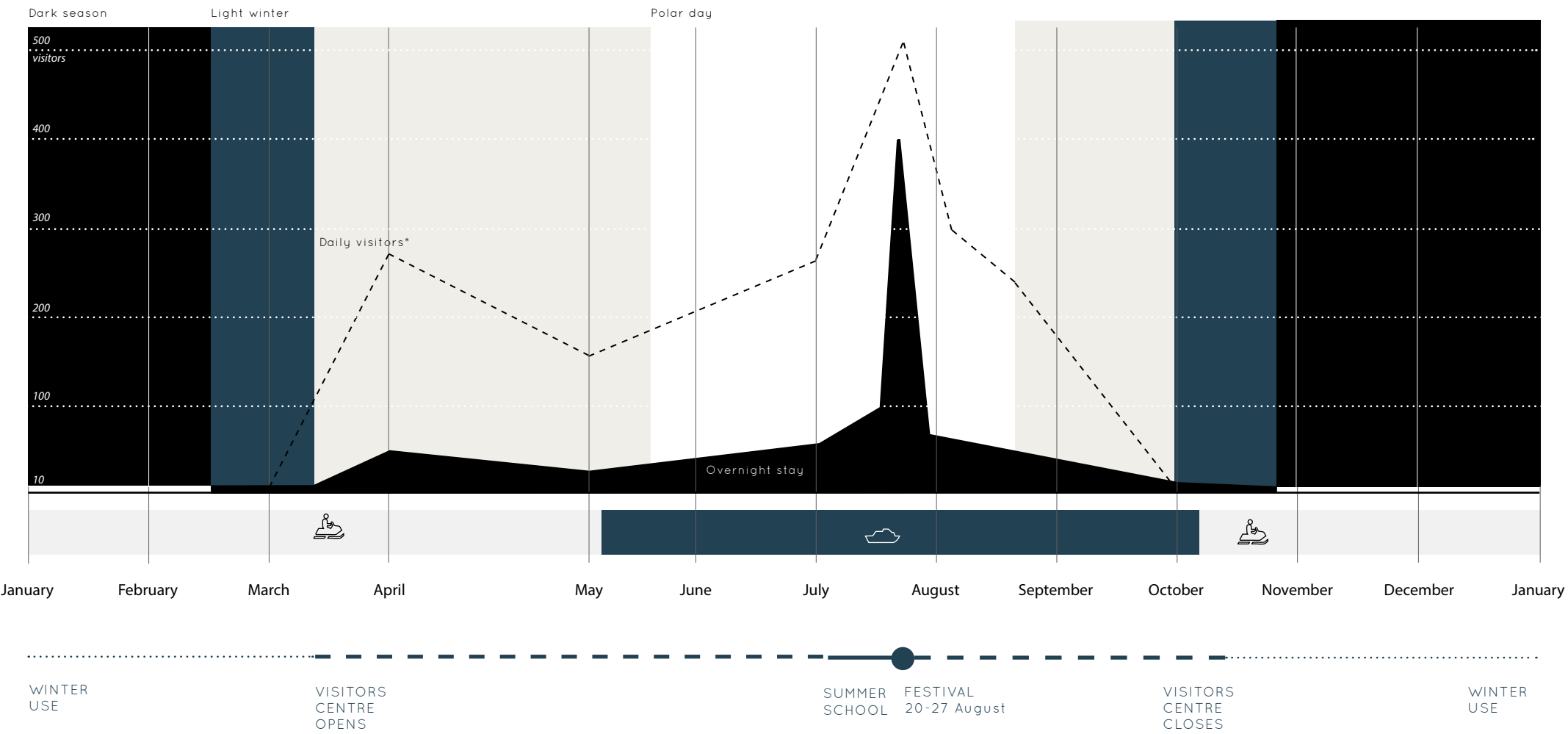
SPECULATIVE TIMELINE

The initial idea is to develop a strategy of a dynamic revitalisation of Pyramiden. The idea is based on a strong and growing interest in developing the settlement as touristic destination in the last years. Big seasonal shifts in weather conditions and other natural factors such as snow, freezing and melting of sea ice and the sun cycles determinate accessibility of Pyramiden for visitors.

The proposal is to plan a summer season highlight, that would create a peak of visits and a connecting series of events, such as a summer school and art residencies.

The touristic season opens in March when the sun comes back and it has a dramatic increases during April. In May there is a fall in the number of visitors since the sea ice is too thin, making it dangerous to use snowmobile, and the fjord is not open for boats yet. Summer flow is steady strong in July-August, during the warmest time of the year and Midnight sun period¹. The span between day visitors and overnight stays decreases due the possibility of camping in Pyramiden, especially during the Festival

DYNAMIC USE
PYRAMIDEN AROUND THE YEAR



1. "This is Svalbard," publication by Statistics of Norway, 2014

Other data: Norwegian Meteorological Institute

* not in scale. Speculation based on data from overall visitors staying overnight in Longyearbyen 2013. Source: Svalbard Tourism

PERFORMANCE AS REVITALISATION

Revitalisation in the current project happens in a new form of temporary life which is the festival of performing arts. Performing arts includes live music and contemporary theatre productions that engage with site specific and contemporary discourse topics. The ghost town fills up with performed life instead of everyday life and the place becomes vibrant again for a short period of time. Instead of conserving the town and its history as a static entity, the concept is rather to fill the places with new stories that would create connections to memories and inherent qualities of the town.

The place has its very specific character within its socio-geographical and historical context, which turns the abandoned town into a perfect scenery for artistic and theatrical experiments. Pyramiden itself represents a confident and brutal Soviet development that exists alongside extraordinarily beautiful natural surroundings with its own identity. The existing environment has strong scenographic qualities and it is a place filled with past memories that has very intense emotional impact.

An experimental form of preservation that considers the importance of cultural heritage, knowledge and tourism does not mean conservation or full restoration of the area. Instead of museumification and final conversion of the town into a monument, the aim is to create a space that is able to host life in its very diverse forms and even fictional ones.

The abandoned functionless town is part of a landscape. The contrast of the man-made component to the natural one is dramatic in terms of both scale and character. Limited by external walls and facades, the architecture becomes rather a stage set, a scenery, which has that special ambience of emptiness, decay and melancholy so typical of abandoned buildings. The disposition of housing blocks and surfaces in relation to each other and to the strong landscape creates a unique physical and sensual man-made landscape.



Rebecca Litchfield, Grabowsee Hospital. From the book "Soviet Ghosts – The Soviet Union Abandoned: A Communist Empire in Decay"

THEATRE AS FORM OF LIFE

Theater performance as a time based art has a double quality of being both artificial and genuine, deeply site specific and universal at the same time. (f.i. "The theatre and its double" Antonin Artaud). And indeed this quality seems appropriate and moreover explicitly reflecting the specifics of Pyramiden.

In proposing a possibility for transparent walls around fiction- or documentary-based theatre events one adds the effect of montage. By placing a play in the very specific surroundings of Pyramiden, they will add something to the experience and understanding of the play, and at the same time the play will enrich the surroundings with new additional layers of interpretation and meaning.

The performances will give friction to the unique existing atmosphere of Pyramiden and create a whole range of new possible perceptions of the place in addition to the ones gained via regular excursion.

The location and the dramatic landscape turns the common mining town into something extraordinary. The remoteness and isolation gives a certain sacred ambience even if the material structures and architectural qualities of the buildings are pretty ordinary. The long journey itself plays a big role, since the sensation of being transported far away from the rest of the world will be a central part of the Pyramiden Afterlife experience.

TIME BASED ART AND RUIN

Time based art has the potential to open up new depths and to expand the spectrum of temporal and spatial experience of the space. It allows travel within time spans, to prolong and to shorten it, and in addition create the situation of being in two time-realities at the same time.

The theatrical narrative or the dramaturgy of a performance creates a dynamic time flow, through changing the intensity of scenes, pauses and other dramaturgic elements. This is not typical for the experience of architectural space in «real life». Introduction of retrospective technique allows placing the action in various times, switching from present to past, from past to future. In a way this can correlate with the experience of visiting ruins, where the visitor must evoke the imagination to recreate the image of past events happening in the remains of architecture and structures. The open mountain landscape surrounding the abandoned settlement sets the time scale of «eternity» and highlights the temporal side of human built structures. Being built as monumentally though temporary constructions for very utilitarian reasons, they have been destroyed, rebuilt, expanded in more massive way, abandoned, deteriorated and slightly renewed again in a time span of less than one hundred years. However, short time events such as theatrical performances could involve either spatial and temporal features in the interplay and create an experience way more rich and intense than a regular walk through the town.

BEING IN A MOMENT

The special feature of performing arts that differs dramatically from other forms of art is the short period of existence. A performance exists only as long as it is performed and there is no way to hold on to the moment. This ungraspability of the theatrical experience in my view resonates with the idea of experimental architectural preservation in the sense of avoiding to freeze life and its representation and turning the whole place into a museum.

Being unique due to its remoteness, monumentality, abundance and incredible contrast with the landscape, the town already contains a strong dramatic effect in itself. Layers of history, memories, architectural features and artefacts give a rich background and evokes interest in visitors. Being so intense, it will always exist actively in the background of any event taking place there.

The town is in one way a monument over the everyday life, by chance placed into conditions that has turned it into something extraordinary. Nowadays there is no routines going on, no daily life, opposite to an ordinary town. It has become a ghost-town, a drama-town, a town of curiosity, silence, ruin, a post soviet amusement park. Considering these odd combinations it seems pretty obvious that the place is a perfect ready-made stage set with a high scenographic potential.

Instead of museification the town will obtain a new status, new temporary layers during the events. Performing art events will add new time frames of theatrical universes to the town. Beyond its personal past and present moments it begins to exist in a «current moment».

PROJECT STRATEGY

AFTERLIFE: NEW FESTIVAL OF PERFORMATIVE ARTS ON THE EDGE OF THE WORLD

Pyramiden Afterlife is series of events including an annual festival of performative arts, theatre Summer school, residencies and other side events.

The festival brings together international performing artists, experimental theatre groups and students to collectively experience a remote and fascinating location and the unique scenographic qualities of Pyramiden.

The main focus of the festival is performing arts, such as contemporary theatre, dance, music etc. Experimental and collaborative productions introduces the theatrical form of life to give sparkle to the abandoned town. The range of projects, from very site-specific to more free form events, will bring the audience, the locals and the artists together towards a common goal, a sporadic revitalisation of the area in local scale and a celebration of the shift to the post carbon era, bringing arts as action to the place of a shut down coal mine.

The program aims to support the concept of project theater rather than presenting institution-based productions. It aims at productions with a high degree of artistic independence, open and critical, with high international standard.

The summer school program provides the opportunity for artists and students to explore the area and create site specific productions, reflecting a variety of issues which Pyramiden has in rich supply - from history, memories and nostalgia to the global arctic environmental concerns. These projects and ideas will be presented during the festival to the public. So an important quality of the festival would be the possibility of meeting and collaborating for all interested professionals from various performance and stage related arts. The festival provides a shared experience for its participants, starting from travelling together to Svalbard and to Pyramiden itself. Thus one aim is to break down the division between the actor and the viewer and give a certain ownership to all participants in the festival.

The festival aims to be international due to its nature and location. Svalbard as a visa free destination and multinational population is a perfect playground for experiments in contemporary theatre.

There is also possibility to expand it to the winter through residency programs placed in the new constructed building.



Robert Wilson, *The Life Death of Marina Abramovic*, © Lucie Jansch

PROGRAM

SVALBARD EVENTS: MUSIC & ARTS

In last years the interest in Pyramiden has been growing within local and international artists and performers. There are variety of events, projects and even residencies¹ currently happening, on different part of Svalbard and in Pyramiden itself. At the same time the cultural life of Longyearbeyn actively has been actively developing and due the increasing touristic flow and growing permanent population from all parts of the world, here is a demand for development of the cultural life.



Norwegian Tromsø based electronic band Frost has made a musical performance in the Culture House of Pyramiden. The event was attended by about 150 people, most of them specially travelled to Pyramiden from Norway. The city was just for a day full of life and people, music and visuals.

Arctic Circle Residency, a series of artist and scientist-led expeditions and residencies, main office in New York, USA, www.theartcticcircle.org



Locals from Longyearbyen enjoying themselves performing in the nature miles from the town



Casper Clausen exploring the soundscape of Pyramiden. The town inspired the Danish band Efterklang to the album Piramida and very special sounds recorded on the location were widely used in their music.

Photograph from "The Ghost of Piramida", a film by Andreas Koefoed about the trip of Efterklang mixed with the story telling and of documentary footages from one of the former citizens of Pyramiden

FESTIVAL STRATEGY

NETWORK OF LOCAL EVENTS

Region of Norther Norway is fairly reach for events considering the density of population. The Afterlife festival can become a part of the network of existing festivals of theatre, performance, arts and other cultural events. Important collaboration could be Barents Spektakel, even though it is happening far away in Kirkenes, it has been successfully celebrating the cultural interconnection on the Norwegian-Russian border. It is an annual event, that has wide programm of side events in the region.

Festspillene i Nord Norge is a biggest festival of Northern Norway presenting all range of cultural events including theatre, music and exhibitions. Another example is very small scale event based in Longyearbyen that has original format of performance arts, that does not imply intense 3-day full-time event, but rather small regular art actions.

ARCTIC ACTION
SPITSBERGEN
Longyearbyen



Wathiq Al-Ameri and Ali Al
Fatlawi "White hunting black"
Arctic Action

FESTSPILLENE I NORD-NORGE

Harstad



BARENTS SPEKTAKEL

Kirkenes



INSOMNIA

Tromsø



AFTERLIFE

Pyramiden



FESTIVAL MANAGEMENT
CASE STUDIES

TIFF / TROMSØ INTERNATIONAL FILM FESTIVAL (NO)

26th TIFF, 18-24/01/2016
Tromsø, Norway

Tromsø International Film Festival screens challenging quality films for a local, national and international audience. The program includes a selection of shorts and documentaries from the Films from the North program, along with special screenings and various other events. The outdoor cinema is located at the main square in the heart of Tromsø. The festival has expanded almost ten times since its beginning. Main venues are Norway's oldest cinema building, new building of the Hålogaland Teater and city's KulturHuset.

Side projects:

Verdensteatret Kino, regional cinemateque and area of cultural debate
Silent Film days / September, Verdens Beste Children's Film Festival / Spring, Collaboration in North West Russia and Barents Film Industry

Official partners:

Troms County, Tromsø Municipality, The Arctic University of Norway, Innovation Norway and commercial companies as Lerøy Seafood group, SpareBank 1 and Hurtigruten

Accommodation:

Hotels in Tromsø
Private rentals

Transport:

Flights to Tromsø
Hurtigruten, ship
Bus/car drive

TIFF 2015

59 142 admissions
10 000 participants
364 volunteers
5 screening venues +
outdoor cinema



SALT FESTIVAL (NO)

29/08/2014 - 06/09/2015
Sandhornøy, Norway

Concept of SALT is a nomadic festival. It started in August 2014 from the small island close to Bodø in Western Norway and has an ambition to travel international across Arctic area of the globe. SALT now is several structures that could be unmounted and erected in the new place. They include exhibition space, hosting facilities, sauna, and essentials.

Venues:

Arctic Pyramid - outdoor exhibition space
Gildehallen - outdoor event space, 1000 pers.
Agora - public space + sauna, 120 pers.
Cafe Naustet

Architects:

Rintala Eggertsson Architects
Joar Nango

Accommodation:

SALT Njalla - tent-house upto 4 people
Camping
Hotels in Bodø

Transport:

Flights to Bodø
Boat to Sandhornøy
Bus/car drive to Sandhornøy

2500 visitors

in June 2015 on the musical
band's concert



FESTIVAL MANAGEMENT

CASE STUDIES

ISLAND AIRWAVES (IS)

2-6/11/2016
Reykjavík, Iceland

Since the first edition was held in 1999 in an airplane hangar, Iceland Airwaves has become one hip events of Nordic countries, meeting point for Icelandic and international music and sparking Reykjavik life in dark times of the year.

Venues:

Harpa Reykjavik Concert Hall
Eldborg – main hall, 1800 pers
Media Centre

Architects:

Olafur Eliasson,
Henning Larsen Architects and Batterið
Architects

Accommodation:

Hotels in Reykjavik
Private rentals

Transport:

Flights to Keflavik
Bus to Reykjavik



9000 visitors in 2016

Airwaves music festival 2008
at the “Blue Lagoon”
in Gullbringusysla, Iceland

No.theatre.pl / NO THEATRE,PLEASE (PL/NO)

All year 2014, main events 29/06 -5/07.2014
Szczecin, Poland

The name of the project refers to the participating countries but also the concept of “de-theatral-ization” of activities that do not take place inside buildings, but enter into a dialogue with the living tissue of the city. The project includes participant’s presentations and workshops for young people. Other parts of a program are seminar CITY/WORK, focused on creating activities in public spaces, exhibitions, and site specific theatre shows - in the forest, in the harbour, in the Szczecin library

Side projects:

The International Festival,
Bonds of Culture (theatrical/
musical festival, (PI)
The International The-
atrical Meetings OKNO,
The All-Polish Review of
the Small Theatre Forms
KONTRAPUNKT(PI)
The Bastard Festival in

Trondheim(No)

Official partners:

Theatrical Centre Kana (PI),
Teaterhuset Avant Garden
(No)

Accommodation:

Hotels in Szczecin
Private rentals

Transport:

Flights to Tromsø
Hurtigruten, ship
Bus/car drive

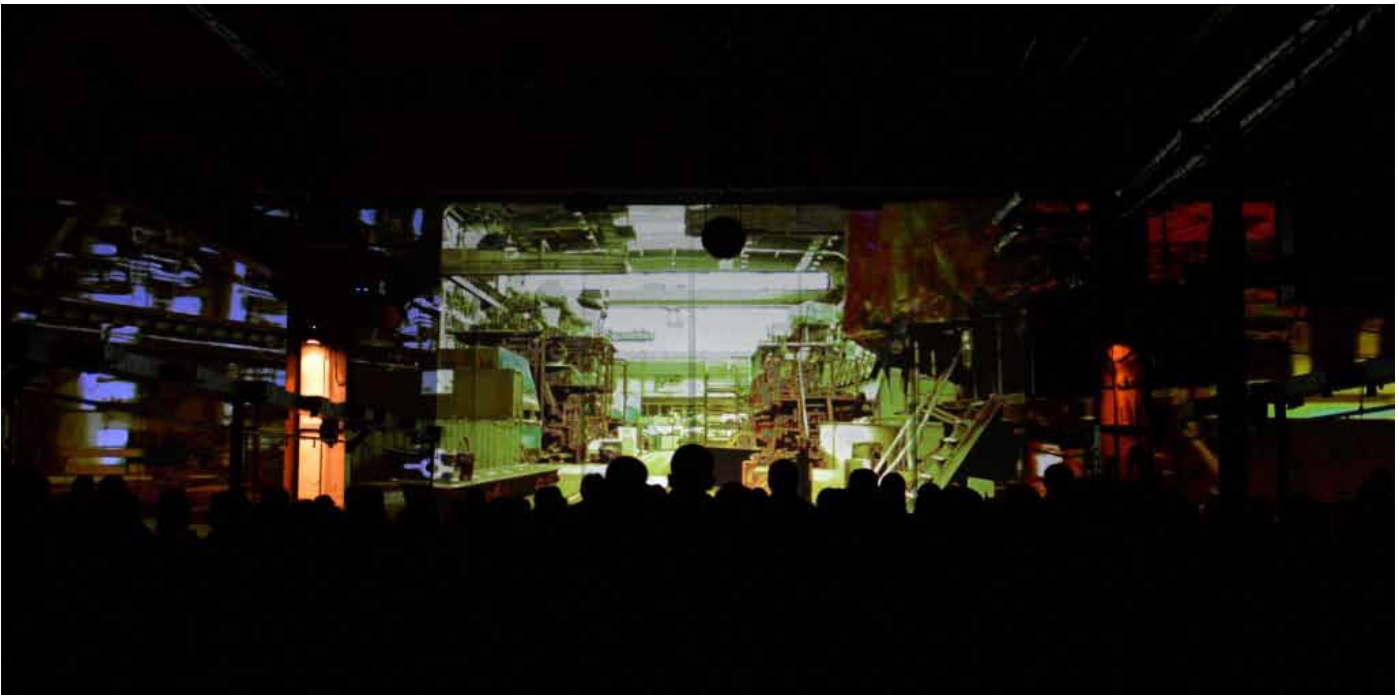


FESTIVAL
CASE STUDIES

THEATRE EXPLORING THE CITYSCAPES



courtesy: M.Zakrzewski



by Adam Ptaszyński



by Paweł Kula



photos by Adam Ptaszyński



by Paweł Kula

PROJECT STRATEGY

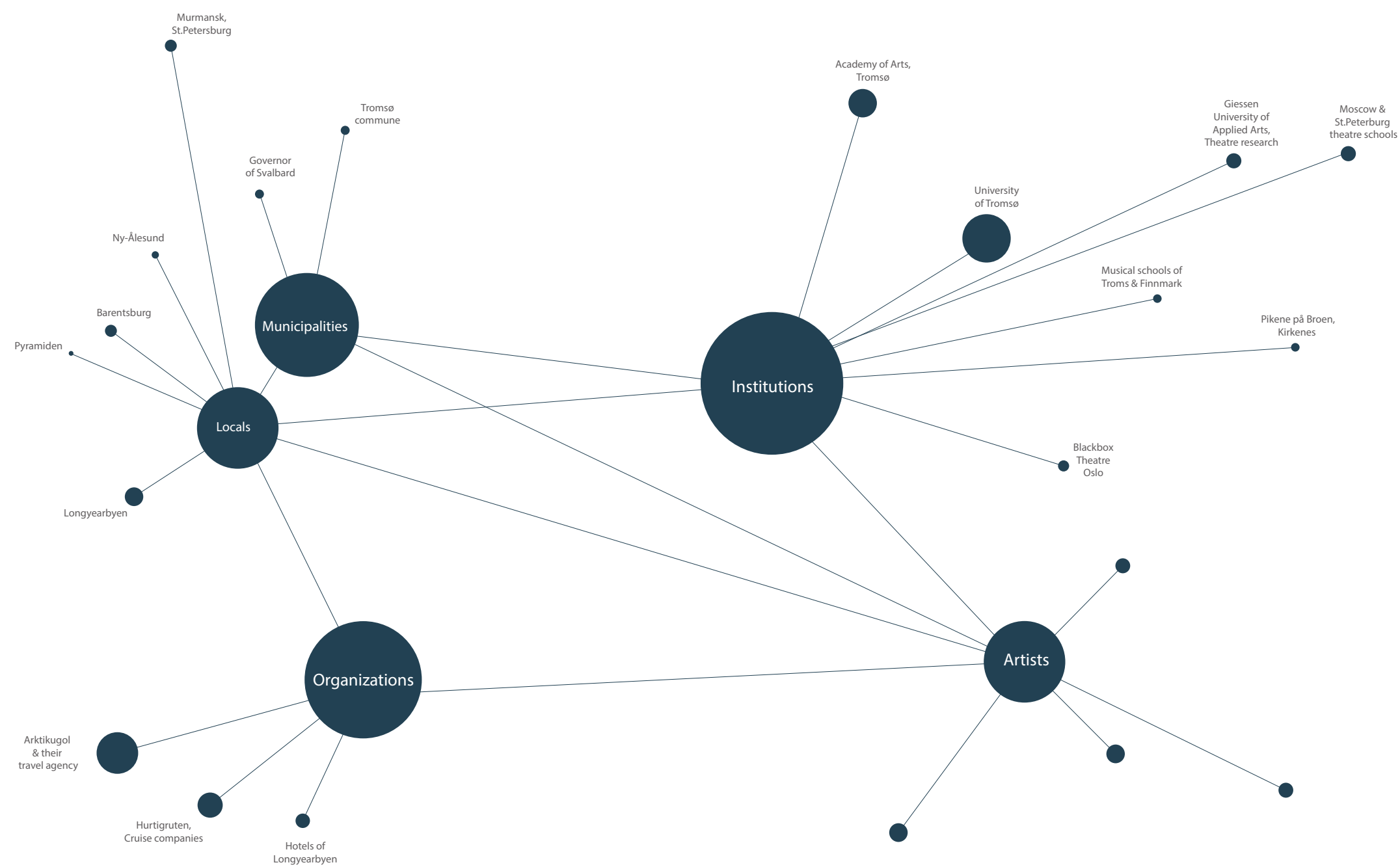
FESTIVAL NETWORK/ POSSIBLE STAKEHOLDERS

After the background and festival reference research it is possible to withdraw proposals on the possibly interested actors and stakeholders.

Financial support comes in many ways through the Cultural Council of Norway and other involved countries. Institutions are mostly state founded and subsidized. There are existing grants system to support artist independent or within institutions.

Main sponsors could be the largest Norwegian cruise ship company Hurtigruten, that provides cruises to Svalbard and other various norwegian and russian touristic industry companies active in the region. Arktikugol is currently performing infrastructure development on their properties, in addition Longyearbyen has an culture and tourism agenda.

Theatre institutions and schools, both Local and international, could possibly have high potential theoretical and practical interest in studying and realising productions in Pyramiden, participating Festival and organising summer schools and other side events.



FESTIVAL SITE

INTERACTION MAP OF USERS

TOTAL 1ST YEAR:
up to **500** participants & staff

Some users could belong to different groups. As volunteers who start working remotely could later join the construction site and change to service functions during the event.

Locals could join and participate in any of group, however the project intention is to involve as much as possible locals with risk of unemployment, as well as provide the cultural environment within the region for both mine, research or any other employees, students and children of any nationality residing on Svalbard.

The diagram presents interaction between users - participants and organisers, to visualise the typology of users, their residence ratio on the site and operation during festival.

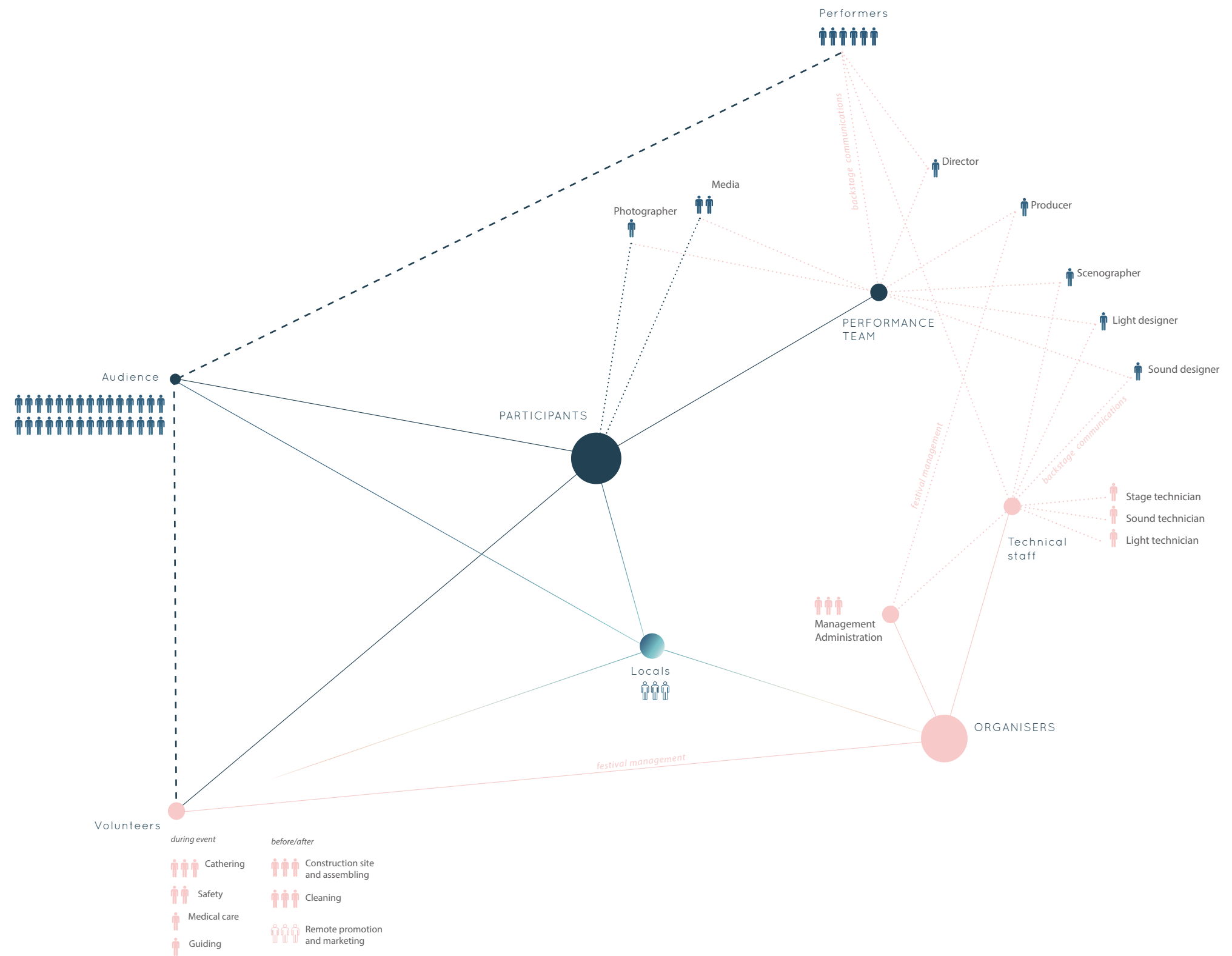
LEGEND

USERS

- Travelling for particular event staying under a week long
- Staying on site for longer period 2-3 weeks
- Work done remotely in advance
- Locals from Svalbard

CONNECTIONS

- Direct connection or sharing functions
- Audience experience
- Backstage interaction of participants
- Backstage staff interaction



HOW TO GET?

to Longyearbyen

- ✈ Regular daily flights from Oslo international airport
- ✈ Regular daily flights from Tromsø
- ✈ International flights from Helsinki (since 2016)

- 🚢 International cruise ships

to Pyramiden

- 🚢 Boats LGB-PYR / MS Langøysund (max 70 passengers)

Additional traffic during festival days:

- Daily 2 ferries from LGB - PYR (2 hours)
- Daily 2 ferries from BGB to PYR (2 hours)
- local RIB boats

WHERE TO STAY?

PYRAMIDEN

- Pyramiden Hotel (former “Tulip”)
currently 50 beds
- Container hostel:
currently 14 beds
- Camping:
Open gravel area behind Pyramiden Hotel for tents,
Includes access to hotel facilities
(cooking, toilet, shower)

LONGYEARBYEN


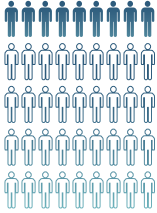


- Hotels
- Private rentals

BARENTSBURG

- Hotel + 2 Hostels
180 -190 beds




YEAR PROGRAM DYNAMICS


	(WINTER)	TOURISTIC SEASON	JULY	20-27.JULY
Population	<div>EXISTING SITE</div> <div>permanent</div> <div></div> <div>currently 3 pers. permanent</div>	<div>VISITORS CENTRE</div> <div>season/all year</div> <div></div> <div>10+ permanent 8000 tourists in 2014</div>	<div>LOCAL EVENTS</div> <div>2 weeks + organisation</div> <div></div> <div>40+ locals and staff 60+ visitors and students</div>	<div>ANNUAL FESTIVAL</div> <div>4 days + organisation</div> <div></div> <div>80+ locals and staff 500+ participants</div>
Main function	<div>CURRENT STATUS</div> <div>IN THE FUTURE: SPECIAL RESEARCH INTEREST, OVERWINTERING</div>	<div>TOURISTIC SERVICE, LOCAL EXHIBITIONS</div> <div>Indoor exhibition space/ temporary exhibitions</div>	<div>SUMMER SCHOOLS, SEMINARS</div> <div>Performance space / 100+ seats Backstage</div>	<div>PROGRAM OF PERFORMANCES AND RELATED FUNCTIONS</div> <div>Performance space / upto 200 seats Backstage Several small scale stages Gathering spaces (indoor+outdoor)</div>
Facilities	<div>Culture heritage site Mining site</div> <div>Abandoned cold spaces: wood workshop sports hall cinema hall+foyer dancing room swimming pool</div>	<div>Office Kitchen</div> <div>Workshop Storage</div>	<div>Rehearsal spaces Workshop</div> <div>Technical rooms + storage</div> <div>Scenography & materials storage</div> <div>Canteen Gathering space</div>	<div>Workshop Technical rooms + storage</div> <div>Canteen Outdoor dining Kioski Bar Temporary structures</div> <div>Info point Outdoor shelters</div>
Hosting	<div>Canteen Hotel Container blocks</div> <div>Abandoned apartment blocks</div>	<div>Staff accommoda- tion</div>	<div>Staff and students accommodation Sauna</div>	<div>Accommodation Camping Sauna Shower WC</div>
Infrastructure	<div>Electricity Heating station Water supply Sewage Storage (inc. fuel) Harbour Helicopter station</div>	<div>Power and water control Dynamic energy use</div>	<div>Additional heating and water system use Reserve power systems Medical point Polar bear protection</div>	<div>Traffic organisation Security Emergency connection and transport</div> <div>Festival equipment storage</div>


FESTIVAL STRATEGY FOR PYRAMIDEN
PROGRAM ON SITE


USERS


Simultaneous
use


-  x 30


performers
-  x 200


audience
-  x 3-10


performers
-  x 50-100


audience
-  x 300


audience
-  x 5


performers
-  x 1-2


stage manager
-  x 5


stage/light/sound technicians
-  x 3


photographer media
-  x 300


visitors
-  x 50-100


visitors
-  x 10


visitors
-  x 10


performers
-  x 20


students
-  x 5


students/designers
-  x 100


seats
-  x 500


participants
-  x 50

guests
-  x 20

guests
-  x 100

camps
-  x 10

staff members
-  x 250

visitors
-  x 100

seats

VENUES

Performance spaces

- Main stage
+ audience seats
- 2-3 side stages
+ audience seats
- Cinema screen
+ audience seats

Backstage

- Backstage area
- Equipment storage
- Scenography storage
- Workshop
- Technical room

Gathering spaces

- Foyer + Event space
- Bar/cafe point
- Sauna

Side events (seminars,
summer school)

- Rehearsal spaces
- Workspace
- Workshop
- Temporary storage

Service

- Canteen

- Info point
- Charging station
- Network point
- Medical point
- Security point

Accommodation

- Hotel
- Container hotel
- Camping

Staff

- Office
- Storages
- Technical rooms

Outdoor

- Open-air cinema
- Dining & gathering area / Lavvo
- Kioski / tent
- Equipment rental

REUSE

“Culture house”

- Suitable for small scale live gigs and cinema screenings
- Fixed amphitheatre cinema 350+ seats
 - Small stage
 - Projection booth

“Swimming pool”

- Suitable for small scale performances without any special technical needs
- Multifunctional eventspace for max 100 seats

“Culture house”

- Spacious gathering space

“Culture house”

- Abandoned dance & rehearsal room
- Possible workspaces

“Swimming pool”

- Temporary storage

Workshop

- Possible use of abandoned existing wood workshop for big structures (remote)

“Culture house”

- Infopoint located in the foyer

Hotel Canteen

- Existing space in use. Possible to renovate the main canteen next season

Radio point

- The only spot with cell network connection

Security point

- Located in existing building. Staff equipped with rifles and rockets

Medical point

- Located in existing building. First aid and emergency transportation by helicopter

Hotel “Tulip”

- Currently in use
- Rooms and showers

“London”

- Former residential block possibly could be renovated

Container hostel

- Currently in use, possible development
- Located in the harbour

Camping

- New camping areas in immediate connection to the hotel

Storages

- Existing buildings

“Swimming pool”

- Equipment rental

NEW CONSTRUCTION

“Coal box”

- Suitable for contemporary theatre and dance performances

Performance space for max 200 seats	400 m2
Backstage	100 m2
Tech rooms	12 m2
Wardrobe	5 m2
WC	10 m2
Workshop	80 m2
Equipment storage	20 m2
Scenography storage	60 m2

Foyer	app 200 m2
Bar	100 pers
Sauna	10 pers

Workspace	20 pers
Workshop	5 pers

Office	10 pers
Staff kitchen	30m2
Technical rooms	20 m2

Temporary structures

Open-air cinema	250 seats
Dining zone	100 seats
Tents	

-  Local temporary heating
-  Proper heated building
-  Outdoor

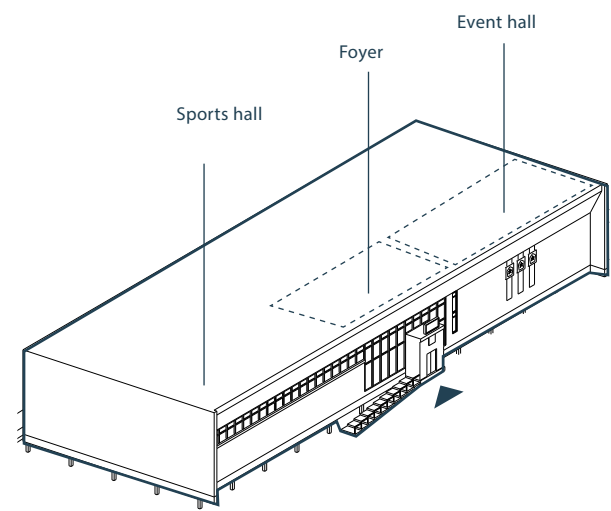
VENUES & FACILITIES LAYOUT



FESTIVAL WEEK
STREET VIEW



REUSE



THE HOUSE OF CULTURE AND SPORTS,
Existing building, 1970s

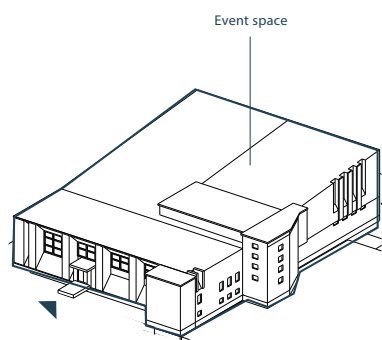
Foyer and event hall / cinema to be reused almost with no changes.
Rest of the building is preserved for the exhibitional purposes

Cinema hall has a stage suitable for small performances with fixed
amphitheatre seats for up to 280 persons.
Building has spacious foyer with views to main alley, there is information
centre and could be held parties.

POSSIBLE TEMPORARY FESTIVAL INSTALLATIONS



REUSE



SWIMMING POOL
Existing building, 1987.

It still is the northernmost pool, however its functioning requires change of the entire communication system. The space has great acoustics, geometry and its strong identity, that makes it suitable for holding theatre and musical performances. The lightning and sound equipment might be fixed immediately to the roof beams.

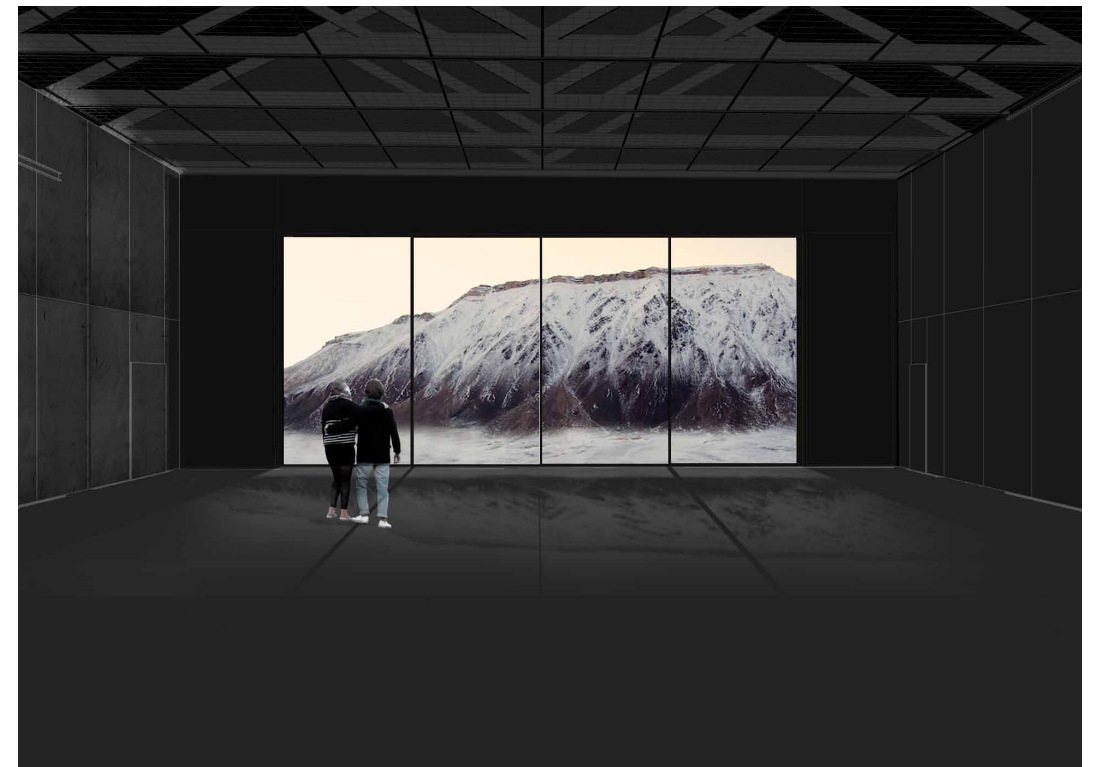
Audience is placed around created the classical arena stage, however for smaller performances seats might be put on the bottom of the swimming pool.



What could be a new performance space?

03 DESIGN

New Performance Space
+
Visitors Centre



DESIGN PROPOSAL

The design speculation focuses on the architectural proposal for the new building, that can host spaces justified as necessary in the frame of the strategy and its dynamic use during a yearly cycle. Functionally it is a new type of performance space, based on “black box” theatre. And at the same time the interior space allows to open it up and include the local scenography of Pyramiden into the performance stage set.

During most of the year the buildings serves as the visitors centre and can shrink down to the research hosting base in winter time to reduce operating costs and reflect the seasonal dynamics.

The project is a design proposal for the building, that could be erected in the abandoned town to affect cultural life, international communications and local social impact.

"Architecture is not simply about space and form, but also about event, action, and what happens in space."

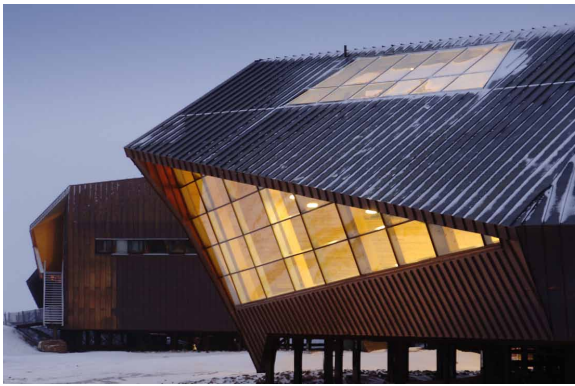
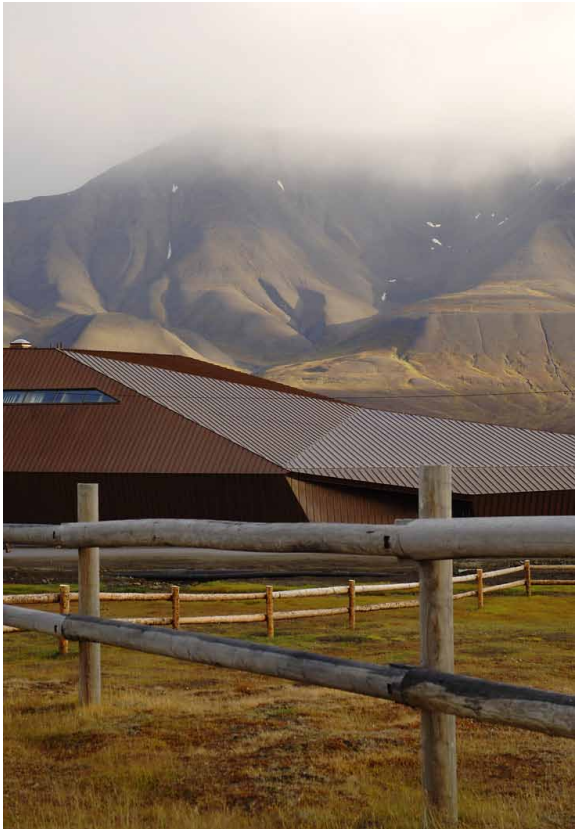
Bernard Tschumi, the Manhattan Transcripts

ROOM PROGRAM

PERFORMANCE VENUE	
Black box type theatre space for max 200 seats	app 400 m2
BACKSTAGE	app 150 m2
Changing rooms	5 pers
Shower + wc	2 rooms
Technical backstage space	20 m2
Workshop	80 m2
Equipment storage	20 m2
Scenography storage	60 m2
PUBLIC	app 250m2
Foyer	app 150 m2
Wardrobe	10m2
WC	3 rooms
VISITORS CENTRE	
Exhibition area	min.100 m2
Event space for lectures	
Office	30m2
Staff kitchen	20 m2
Technical rooms	4-6 pers
Accommodation	
.....	
Total area:	app. 1000 m2

REFERENCES
SVALBARD'S CONTEMPORARY ARCHITECTURE

Svalbard Science Center, Jarmund/Vigsnæs Architects
Longyearbyen, 2005



Geodetic observatory, LPO Architects
Ny-Ålesund, 2014



Residential building, Brendeland & Kristoffersen
Longyearbyen, 2005

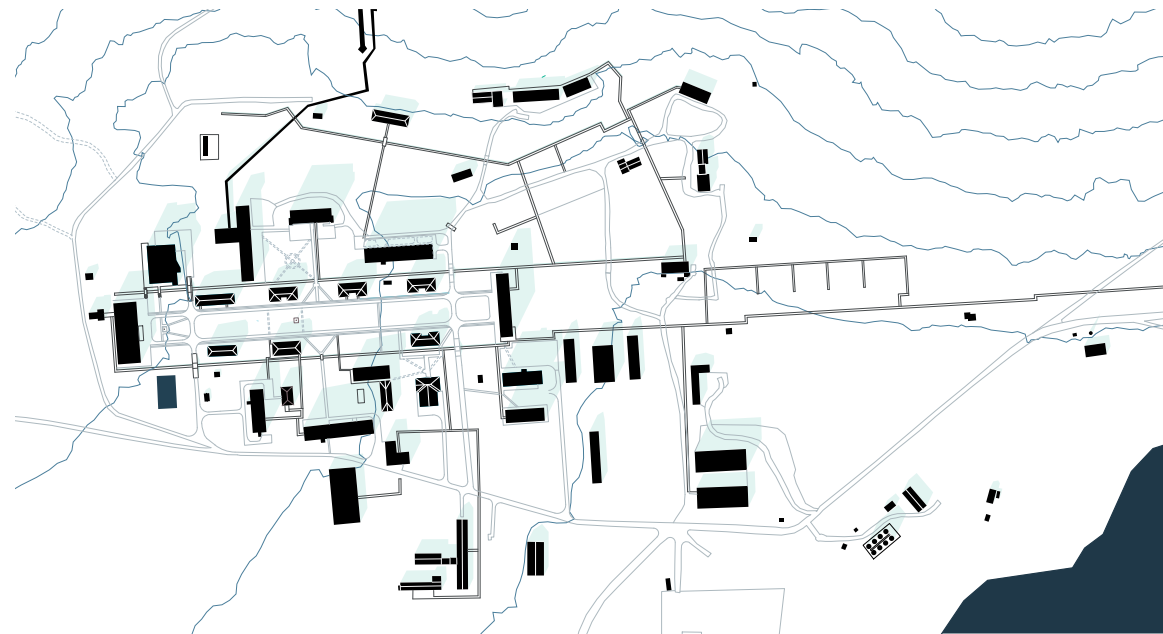


PROJECT SITE

The selected site is located in the northern part of the town, in immediate connection to the "main square" in front of the existing building of the Culture house. Strong symmetry of the town planning defines the exact plot for the future building.

SITE FACTORS

- Immediate connection (less walking, safer)
- Main square becomes the event square
- Orientation and views
- Existing infrastructure line
- Symmetry of master plan - historical reference



SITE LOCATION

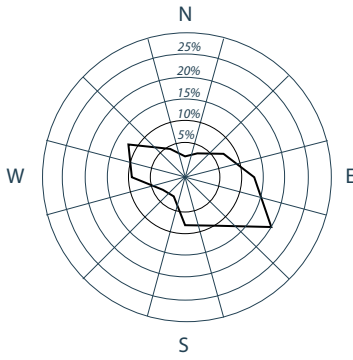


View to the south



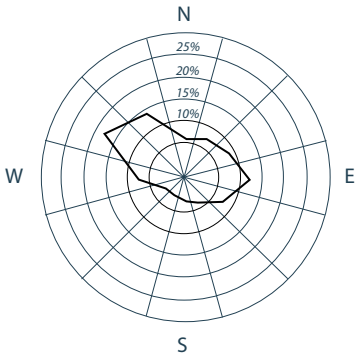
Areal view

THE WINDS



July average 2013-2014

Major wind direction - from the South-East
from the sea and partly the valley side
Average speed of wind - under 5 m/s.
Still days: 6%

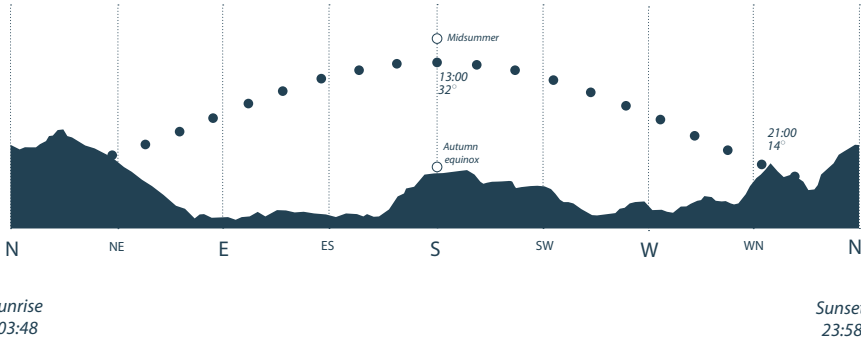


Year average 2012-2015

Major wind direction - from the North-West
Average speed of wind - under 5 m/s.
periodical winds from the East reaching 10 m/s
Still days: 8%

THE SUN

20 July 2016 / Festival



Sources: Wind data: Norwegian Meteorological Institute
Sun data: Interactive sun report, built on exact coordinates, www.suncurves.com

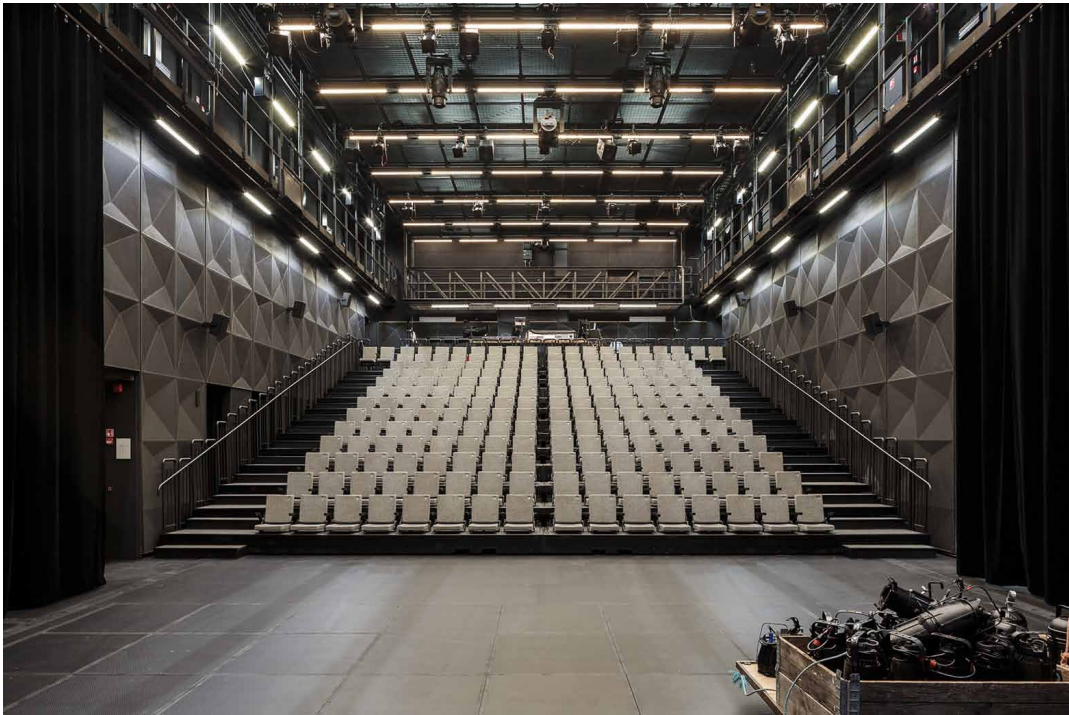
REFERENCE STUDIES
PERFORMANCE SPACES

BLACK BOX THEATRE

Experimental theatre that implies total flexibility of the performance space. Stage and seating are not fixed and the arrangement created to suit the needs of the play, stage could be viewed from many sides. Considerably less scenery is used in such stage layout since it doesn't have a fixed view direction and also due the safety reasons. Storages and service area required around 30% for backdrops, furniture, stage structures, costumes. Separate storage is necessary for light and sound equipment.



Hebbel am Ufer, Berlin, Germany
Classical Black Box in converted industrial space.
Current space hosts 197 visitors in the amphitheatre mode



Kuopio city theatre, ALA Architects, Finland



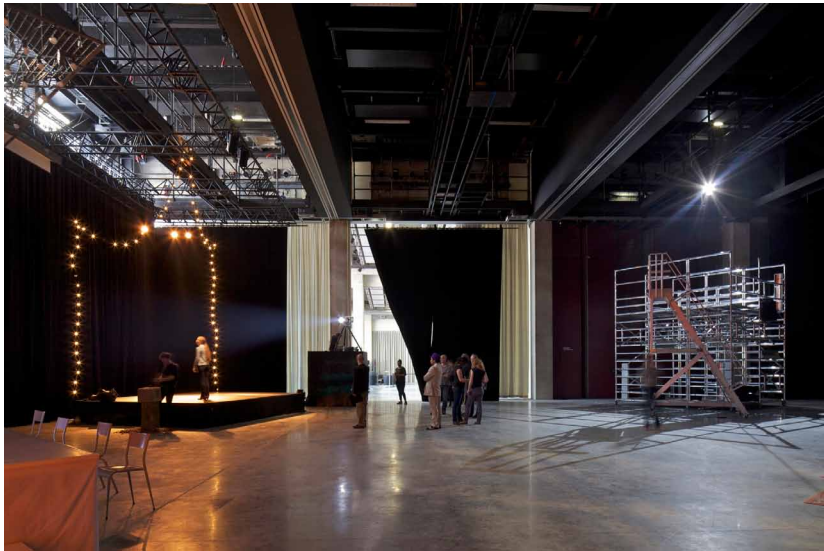
Theatre on the Fly, Assemble Studio
West Sussex, England
Temporary Performance space for 9 weeks

SEMI-OUTDOOR
PERFORMANCE SPACE



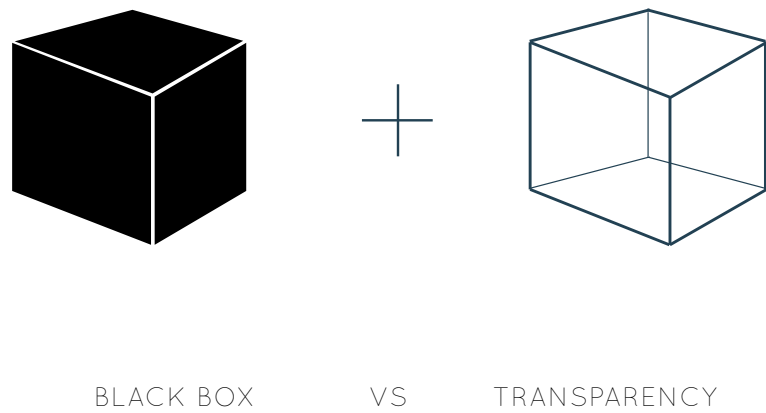
AMPHITEATRE

Classical form with a proscenium space. The audience is positioned in one area facing towards the main stage. There is distinct division between the audience and the stage, created through the frame. Gives the audience a clear view and the on main focus to performers. Used mostly in classic theatre, operas, dance, due wide possibilities of use backdrops, scenery, lighting effects, lifted elements and other special effects



Polyvalent Theater, Lacaton & Vassal Architects, France
Temporary stage set up in a foyer

DESIGN CONCEPT

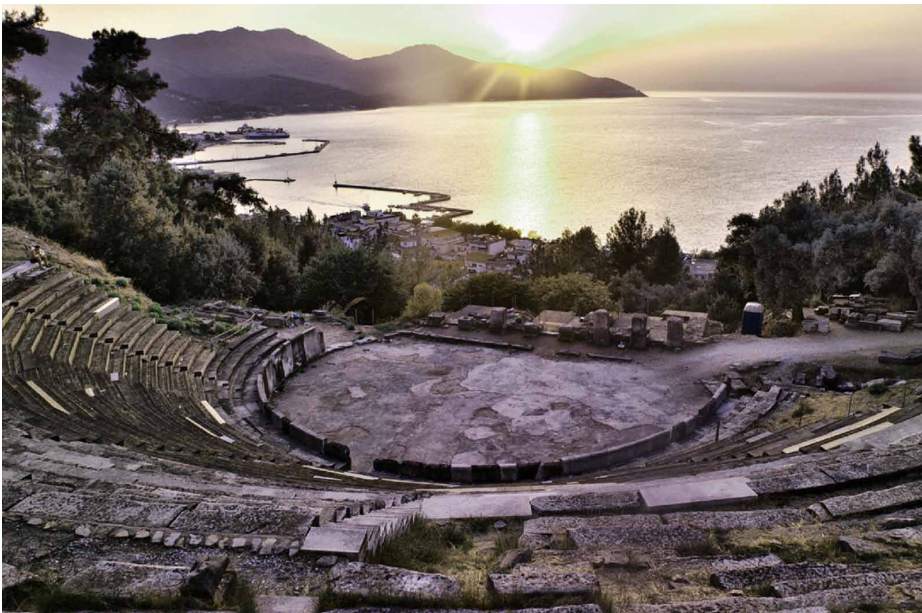


The design proposal is to create a black box based performance space but with a strong transparency, that could be controlled by the needs of each particular production. The controversial combination of total enclosure and transparency is inspiring and challenging in both architectural and theatrical senses.

The concept challenges many contemporary theatre forms, since it opposes the idea of a neutral space so typical for the black box. Modernist drama tries to avoid the real world context. The original idea of a black box as the frame for the modern theatre was closely connected to the desire to create a universal autonomous space, a tailored room where the audience and the stage can be related differently and according to the needs of each particular project. The idea of the black box was a dark void where the theatre could exist in its own right, in a room where the theatre defined the values, the frames, the rules. But as soon as it was invented, the black box was filled with traditions, systems, preconceptions and conventions that each generation of stage artists have battled with.

Adding qualities of transparency that would introduce views from the surroundings and natural light into the black performance space in some sense takes theatre back to its roots in ancient greek theatre, situated in the landscape with the sea, mountains and islands as a backdrop to the stage.

In the case of Pyramiden, this project offers the possibility to incorporate existing scenographic and visual qualities into visiting theatre performances projects and vice versa. This will require adaptation and modification of the visiting projects to the local facilities or the making of very site- specific productions. However there is always a possibility to close shutters or draperies and return to the black box.



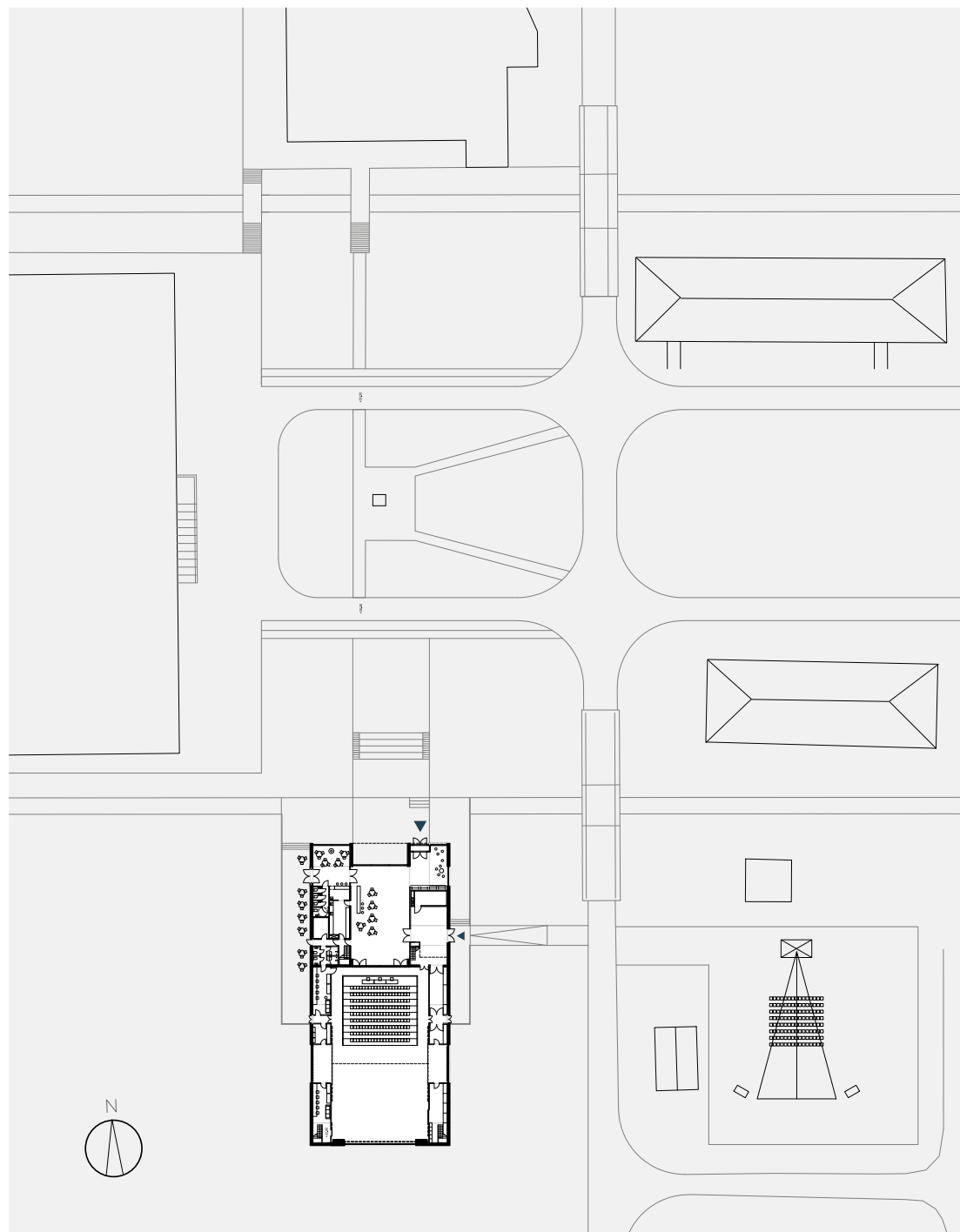
Thassos II, Limenas, Greece, Antic Theatre



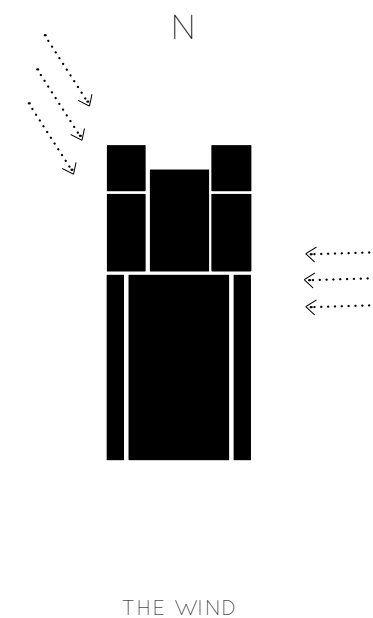
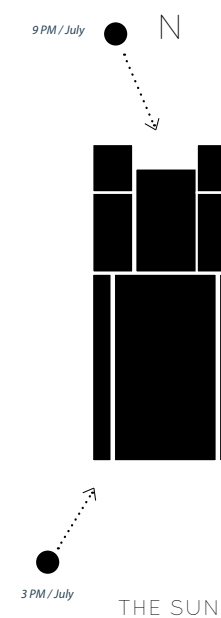
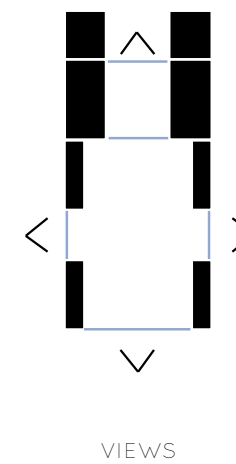
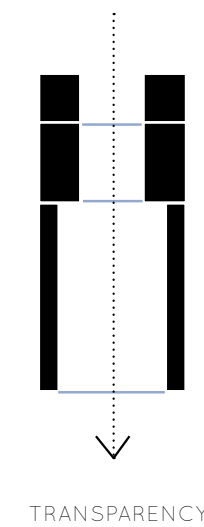
Lady from the Sea, Scottish Opera at the King's Theatre, Edinburgh.
Set and costume design by Yannis Thavoris 2012

1. Looking Into the Abyss: Essays on Scenography
By Arnold Aronson, p 6

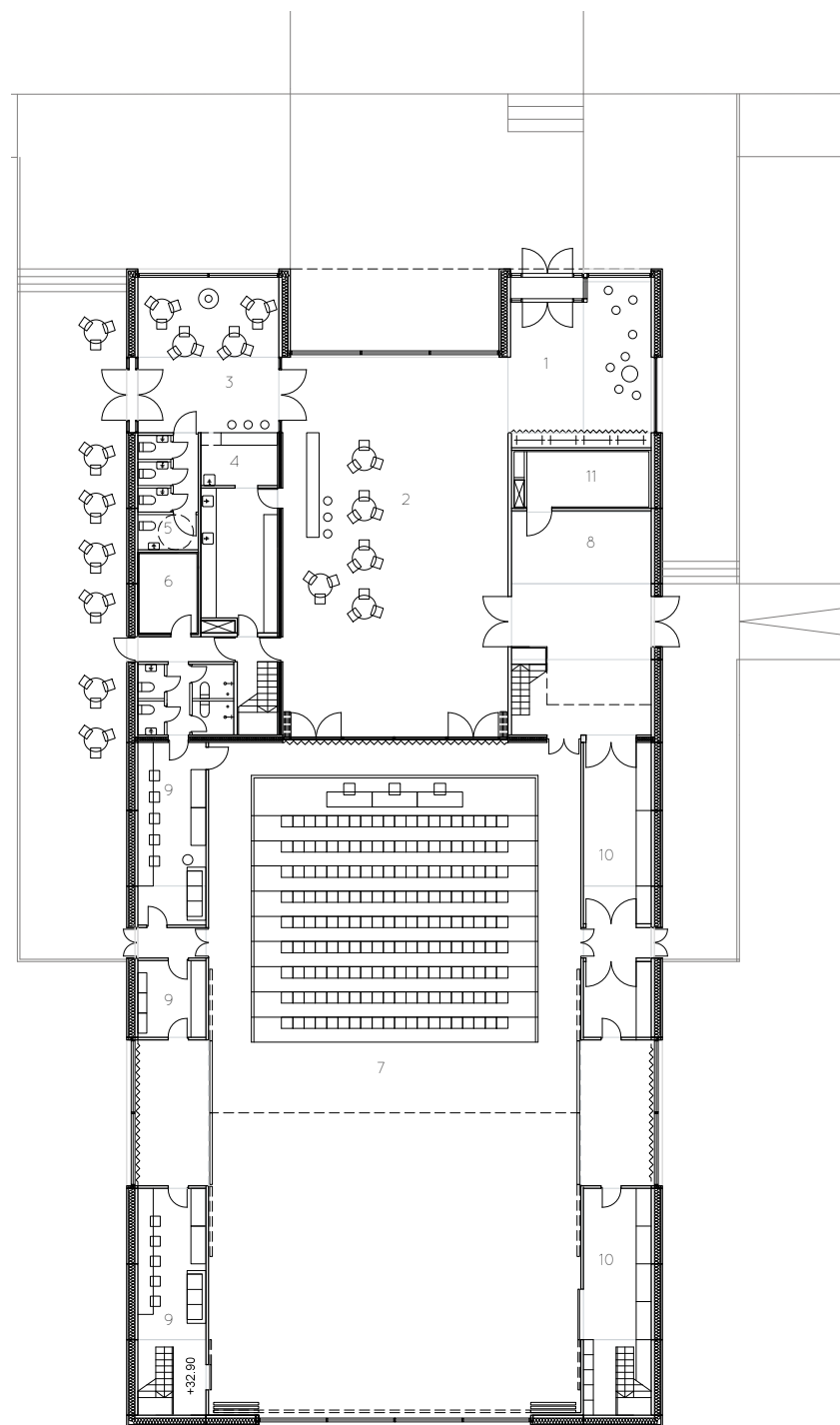
SITE PLAN 1:1000



ORIENTATION AND FORM



GROUND FLOOR PLAN
1:300



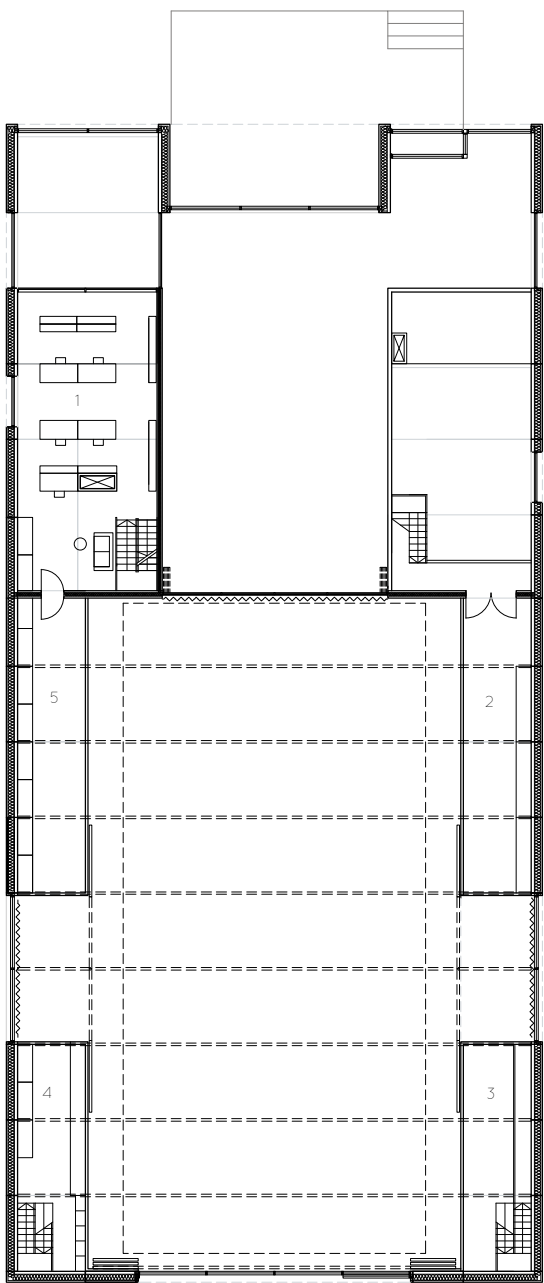
EXPLICATION

- 1. Entrance area
- 2. Foyer
- 3. Bar
- 4. Kitchen
- 5. Bathrooms for audience
- 6. Boiler room
- 7. Performance space
- 8. Workshop
- 9. Backstage
- 10. Backstage storage
- 11. Ventilation & tech. room
- 12. Outdoor stage

GROSS AREA:

GROUND FLOOR	882m2
1ST FLOOR	167,4m2
ATTIC	212,4m2
TOTAL	1261,8m2

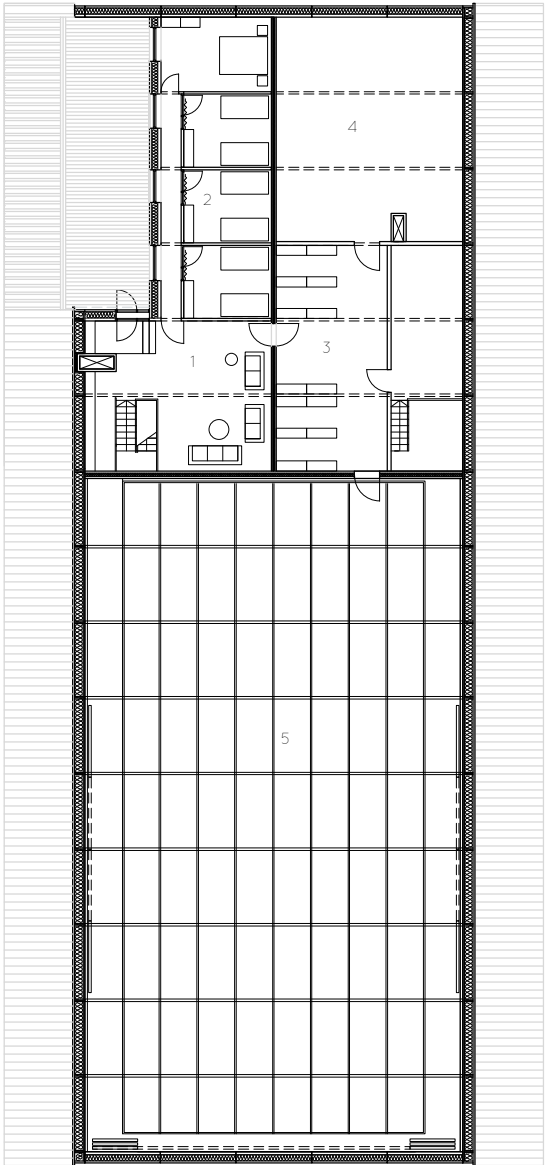
1ST FLOOR PLAN
1:300



EXPLICATION

- 1. Office space
- 2. Equipment storage
- 3. Storage
- 4. Backstage
- 5. Storage & archive

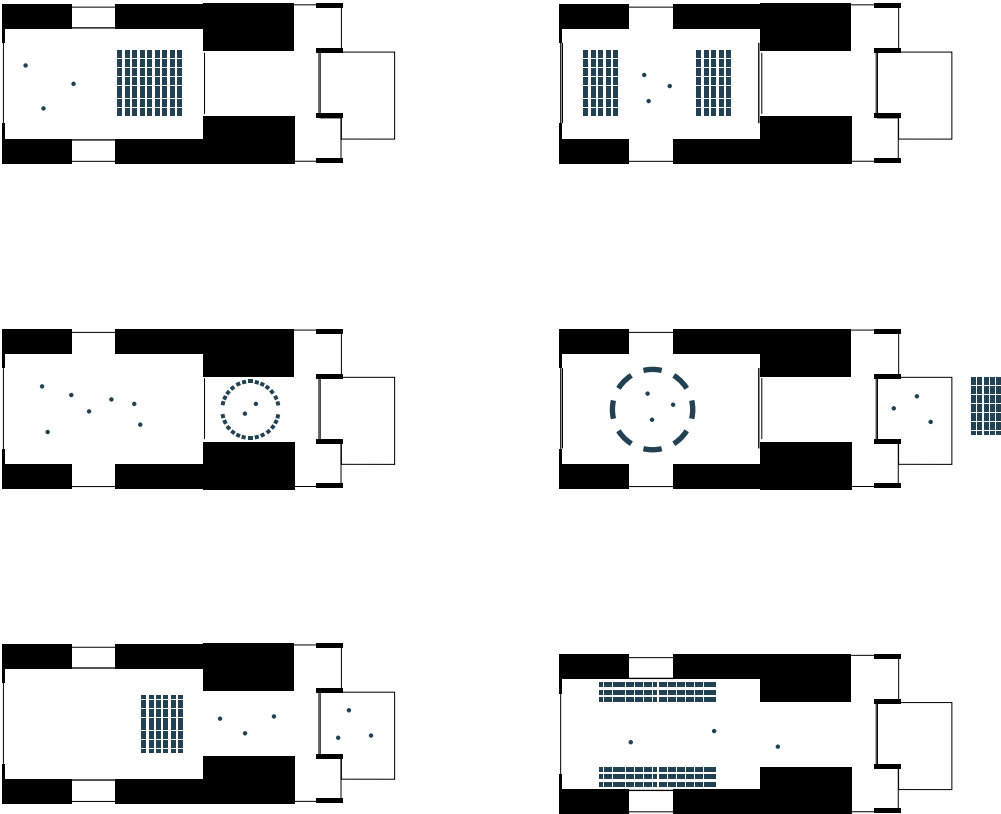
ATTIC PLAN 1:300



EXPLICATION

- 1. Living room
- 2. Dorms
- 3. Lights and equipment
- 4. Technical attic
- 5. Walkable mesh for rigging the lights

FLEXIBILITY OF USE



Variety of layouts for performances. There is possibility to use foyer for more intimate theatre or ice a versa include it into the large performance space. Outdoor stage is a continuation of the main room. Fluid space creates transparency and opens up into all direction, offering a possibility to control and adjust it any moment on demands of the artists.

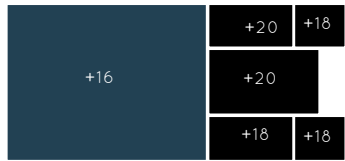
SEASONAL USE



WORK&OVERNIGHT
Winter time
4-6
outdoor t°
December -12



VISITORS CENTRE
Touristic season
6 + 20 users
outdoor t°
April -10
May -2
September +2



SUMMER SCHOOL
July
30-50 users
outdoor t°
July +9

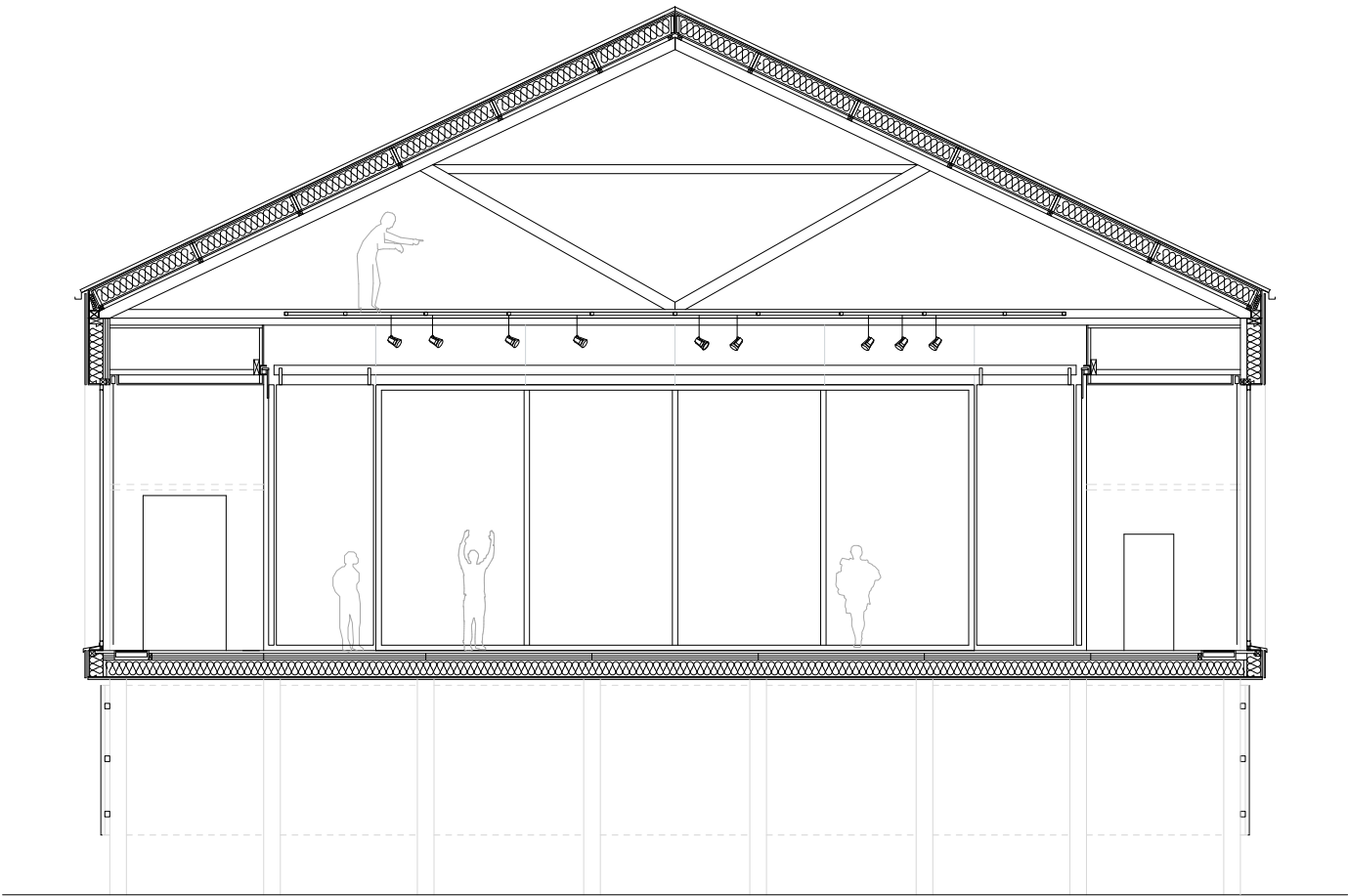


FESTIVAL
20-27.July
250+ users
outdoor t°
July +9

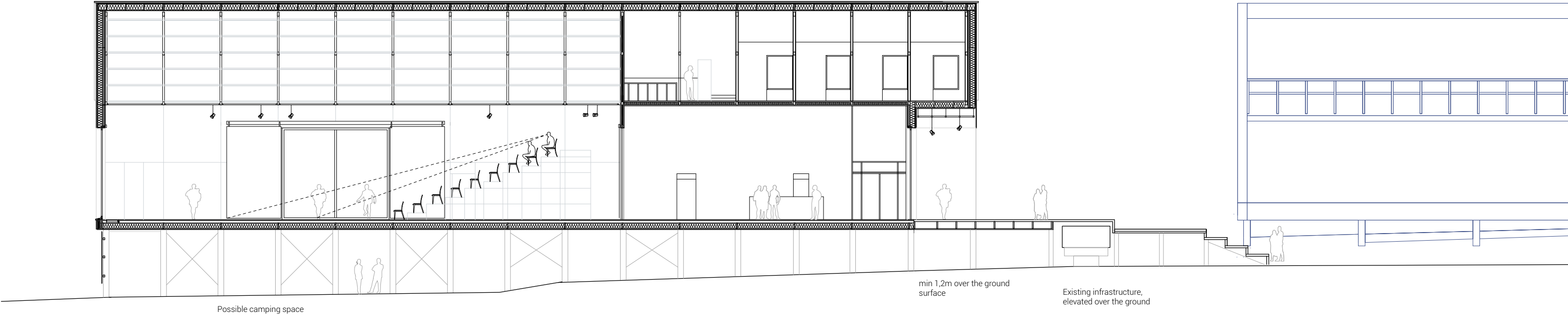
Dynamic energy use in different times of a year. Four scenarios for the pilot year.

There are semi-cold and warm spaces in the building. Heating and functions could adjust to the users needs and weather conditions. The amount of users varies dramatically along the year and in the winter most of these paces could be almost cold. All the communications are planned in the same compact part of the building that would be run around the year.

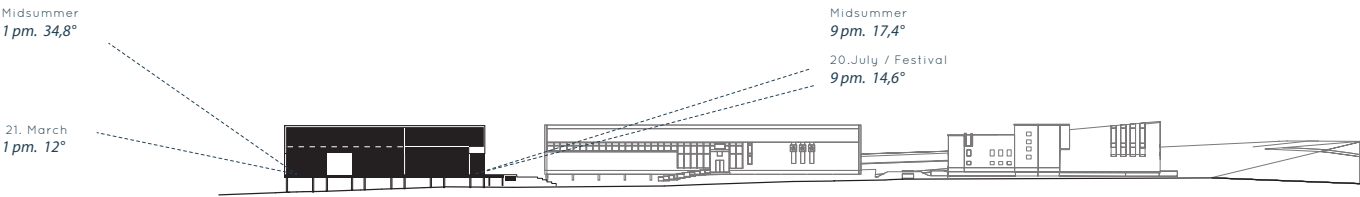
CROSS SECTION
1:200



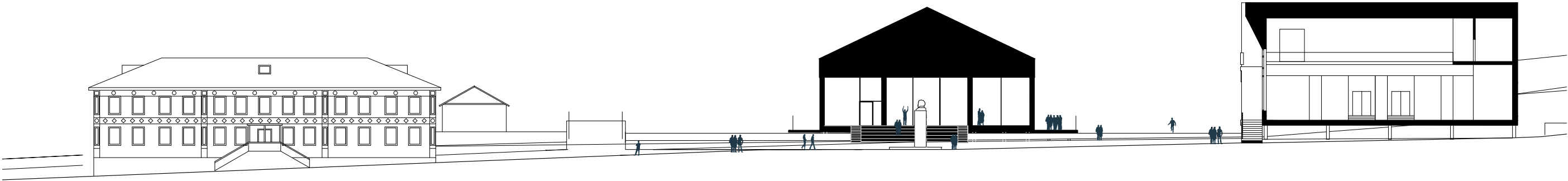
LONGITUDINAL SECTION
1:200



SUNLIGHT / SECTION



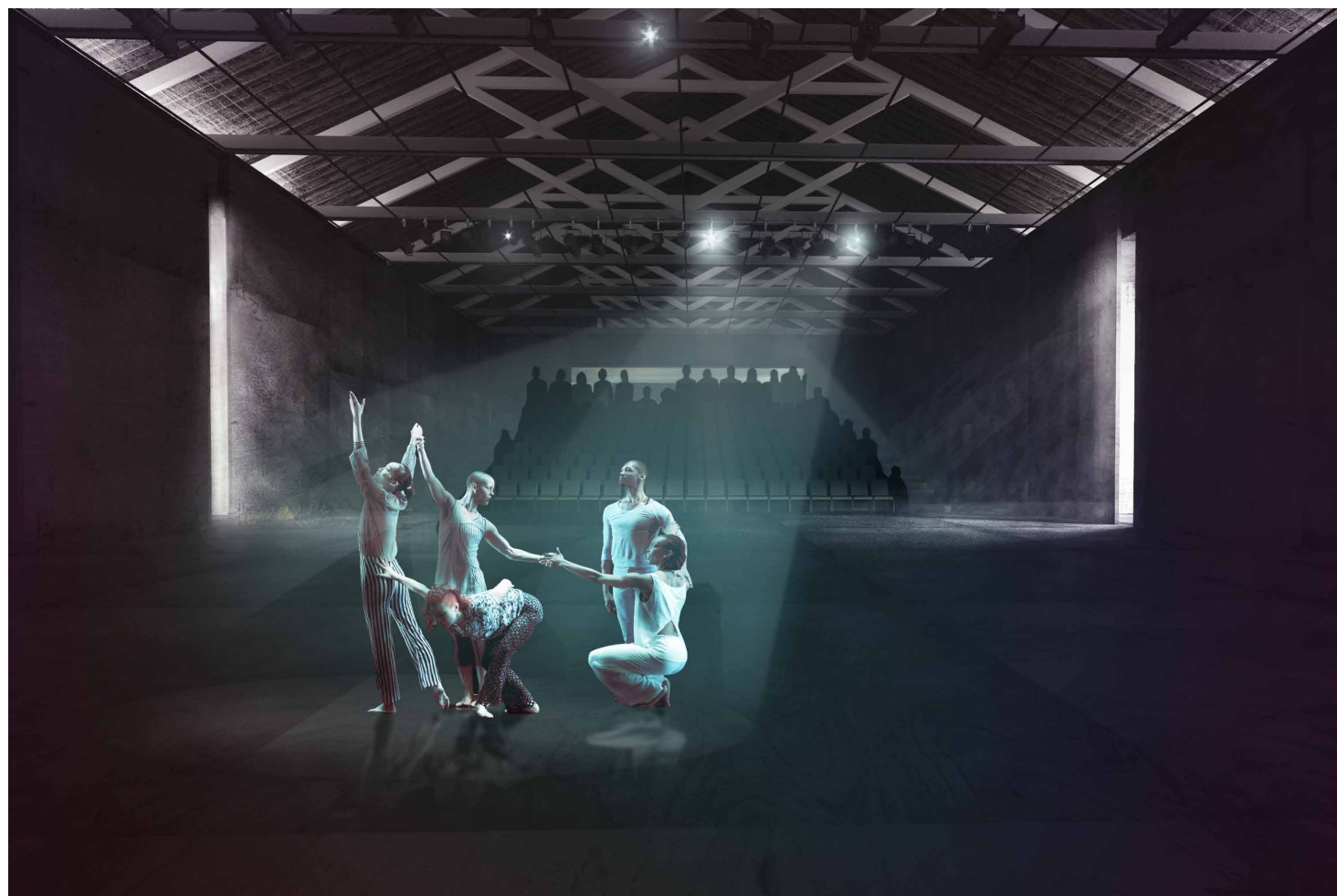
STREET VIEW



VISUALISATIONS



VISUALISATIONS



CONSTRUCTION CONCEPT

STAGING



PREFABRICATION

Northern Norway / Mainland
Winter-Spring

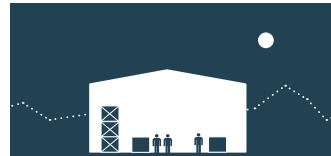
Prefabrication on Norwegian mainland. Volumetric modules and pre-cut elements constructed of wooden materials. Maximum element length 6 meters to be able operate on site



SHIPPING

Summer

During the navigation prefabricated and pre-cut elements are shipped to Pyramiden.



LOCAL PRODUCTION AND STORAGE

Pyramiden
Autumn, Spring

All materials and elements are stored indoor at existing facilities of Pyramiden. Pre-cut elements are assembled (as bolted connections of glulam trusses, some finishing inside etc) and all preparation for the building season.



CONSTRUCTION SITE

Pyramiden
Summer

Quick assembling on site, roofing, plug in communications. Construction terraces, indoor finishing.

CONSTRUCTION APPROACH

Since Pyramiden is located on the island and the entire Svalbard archipelago is existing in the lion share in dependency from the main land, any building materials would be shipped to the site. There are no forest and no local material production, however Longyearbyen has in last years obtained dozens of new buildings, with wide use of timber and even large glass surfaces.

Wood construction is the choice due many advantages of timber - durability, sustainability, low carbon footprint. It is easy to manipulate, ship and deliver to the site. Lion share of building on Svalbard is constructed of timber. The building's construction process is based on the prefabricated modular system. Elements are mostly prefabricated on mainland in relatively small sized - approximately 3x6 meters, or with 6 meter maximum length. That allows to ship, deliver to the construction site and to assemble on site with minimum of equipment and in extremely short time span. The building site conditions are pretty unpredictable and the summer season is only 3 months.

Due the exteme short length of the season suitable for building process and unpredictable weather conditions, one of the main factors is the quick erection possibility. Shipping starts in May when ice opens up and navigation starts. Assembling of prefabricated blocks on site takes under a month. Prefabricated glulam truss elements are fixed together by bolts using basic equipment. Hence the local population could be involved into the building process. That would create a positive social impact for the former and recently fired employees. Up to 100 former miners or others workers from the local community might be teamed under curation of 4-5 professional engineers. Since there are construction companies present on Svalbard, they could be participating as professionals with the knowledge of local specifics and experience in organisation of the process.

STRUCTURE AND MATERIALS

The building is elevated on poles to prevent the melting of the permanent frost - the only thing fixating the construction. The main structure is in timber, to facilitate on-site adjustments and avoid cold bridges.

WALLS

The external walls are made of CLT -cross laminated timber (120 mm), with fireproof rockwool insulation(250-300mm), covered by waterproofed sheet material.(20)

FACADE

Facade is finished with charcoal wooden cladding. (Cladding 27mm+ buttons 40x25 mm) The safe method is to pre-burn cladding in the factory, since it allows better depth control, even though it still might be possible to be performed on site. The charcoal wood has many advantages - it is the most natural and finishing, that does not need maintenance and renovation any soon. From the esthetical point it gives the pearl-black color for the facade and has a direct reference to the Pyramiden as coal mining town.

ROOF

Timber glulam truss covers a span of 15m. Glulam beams (120x200m) are bolted into A shape trusses and are placed every 3 meters, defined by a frame of the modular system of the building. Roof panels (3x2 m) are fixed on the substructure, placed over the truss, in order to avoid cold bridges between panels. Roof panels (plywood sheets 25mm, thermal insulation 350mm, windproof, waterproofed sheet material 20, timber clad top) are prefabricated as well, but instead of CLT, it is a regular timber frame, in order to make them lighter and easier to assemble on site.

INTERIOR

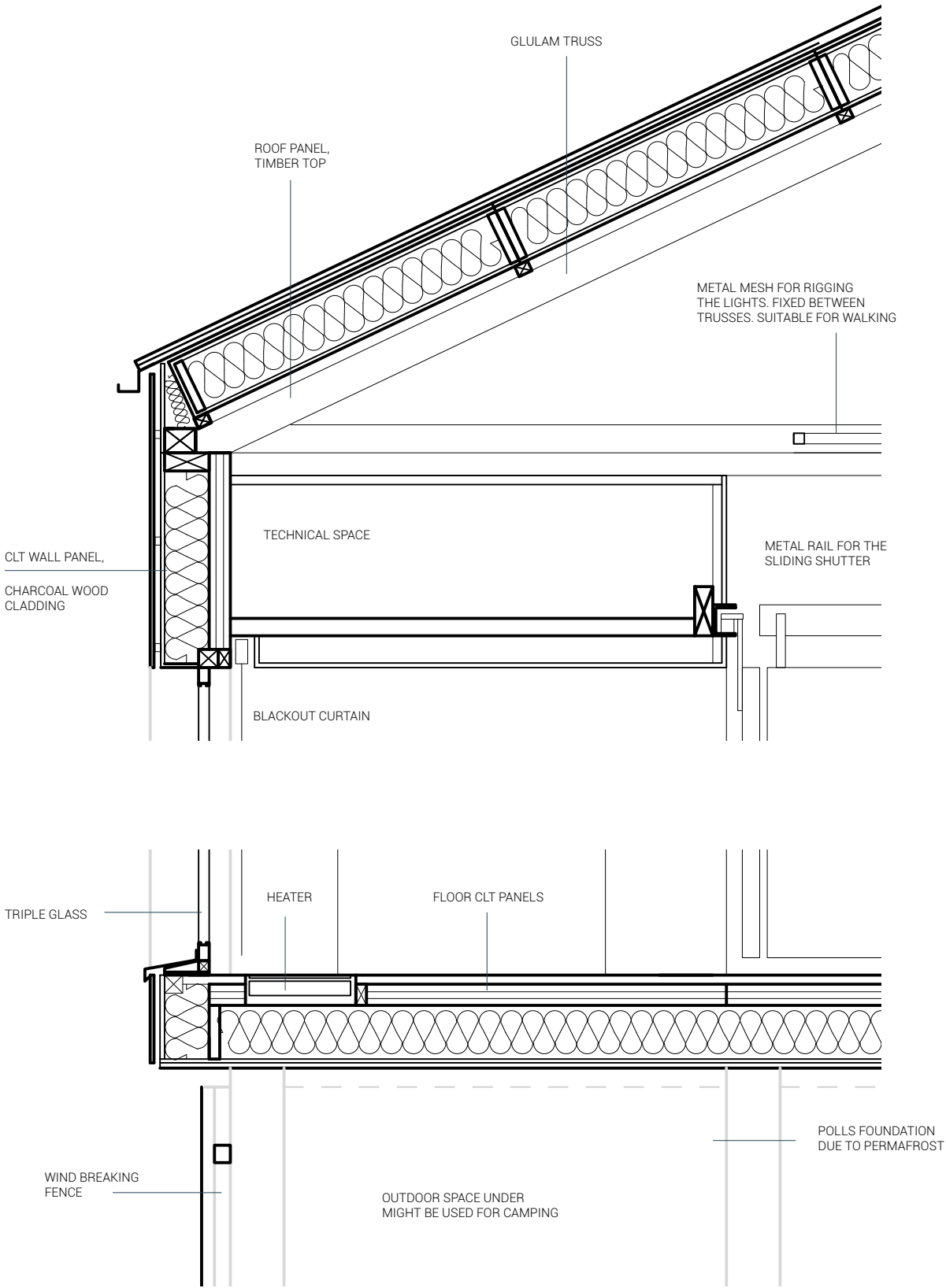
Indoor both roof panels are finished by plywood sheets, same as the indoor walls of a black box. Black tinted varnish is used in order to realize the actual black box. Most of the interior spaces - backstage, workshop, office and attic - have interior walls of plywood finished with transparent varnish. However the foyer, including bar and entry zone, is whitewashed to create a contract to the black box and to reflect as much as possible day light in everyday use of a building.

ENERGY

During first years of operation the strategy is based on local energy production and existing facilities. However in next years proposal implies to shift to renewable energy source. Considering amount daylight during summer and midnight sun period, it seems possible to use photovoltaic panels, that has been already implemented in some new constructed housing in Longyearbyen.

The building has its independent boiler and heating system, that could be functioning flexibly and adjusted on demand. However the water and sewage must be connected into the existing infrastructure. (which is partly in use, to cover the demand of the hotel and several houses).

Black color of the building exterior and the roof allows to receive heat from the sun radiation during the summer time.



APPENDIX

LIST OF REFERENCES

Published literature

Andrassen, E. Bjerck, H.B, Olsen, B. , 2010 - Persistent Memories: Pyramiden – A Soviet Mining Town in the High Arctic , *Tromsø, Tapir Academic Press, 2010*

Aronson Arnold, 2005 - Looking Into the Abyss: Essays on Scenography, *University of Michigan Press*

Borde, Haakon,1983 - Svalbard og havområdene, *Bygd Og By I Norge, Gyldendal Norsk Forlag*

Carlson, Marvin, 1989 - Places of performance, The semiotics of Theatre Architecture, *Cornell University Press* Gronemeyer, Andrea, 1996 - Teater, *Cappelenes Forlag, Oslo*

Elder, Eldon, 1979 - Will it make a theatre, *OOPA, New York*

Mänty Jorma,Pressman Norman, 1988 - Cities designed for winter, *Building Book Ltd*

Umbreit, Andreas, 2009 - Spitsbergen, *Bradt Travel Guides; 4th edition,*

Tschumi, Bernard, 1996 - Architecture and disjunction, *The MIT press,*

Other Publications

Avango, Dag, Solnes, Sander, 2013 - Registrering av kulturminner i Pyramiden, (The registration of cultural heritage is conducted on behalf of the Governor) *document in Swedish and Norwegian. Research aimed to map historical remains in Pyramiden, performed on site in August-October 2013 by Dag Avango , KTH researcher (Royal Institute of Technology, Sweden) and Sander Solnes, Svalbard museum.*

Interview with Bjørnar Olsen (University of Tromsø) by Bailey Douglass at Studies of Prehistory (Studii de Preistorie), issue: 7 / 2010,on www.ceeol.com.

"Arealplan For Pyramiden. Forslag til planbeskrivelse". Research and report document for the planning proposal, developed by LPO Architects, Norway in May 2014 fro Trust Arktikugol. Original document in Norwegian language.

Evans Tristi, Cockwill Brownnett Neil, photographer Litchfield Rebecca 2014 - Soviet Ghosts. The Soviet Union Abandoned: A Communist Empire in Decay

Røyseland Espen, Rø Øystein, 2009 - Northern Experiments, The Barents Urban Servey 2009, collaborative publication for Barents Triennale 2009

Internet sources

Norwegian Polar Institute:
<http://www.npolar.no>,
<http://toposvalbard.npolar.no/>
<http://svalbardkartet.npolar.no>
Norwegian Meteorological Institute and Norwegian Broadcasting Corporation, <http://www.yr.no/>
Statistics and information - the Governor of Svalbard official website , <http://www.sysselmannen.no>
Arealplan for Pyramiden, by LPO arkitekter
<http://www.lpo.no>

ILLUSTRATIONS

p. 5 Photo by Pavel Boyarinov, *modified. from his blog boyarinoff.livejournal.com/4015.html*
p. 9 Image credit: Jacques Descloitres, MODIS Land Rapid Response Team NASA/GSFC, archive.org/details/VE-IMG-3394
p. 10 Bathymetry map, www.ngdc.noaa.gov-mgg-bathymetry-arctic-images-lBCAO_ver1map_letter
p. 20 Archive Photo: Svalbard Museum's Photo Library. *found at cruise-handbook.npolar.no/en/isfjorden/pyramiden.html*
p. 23 Phytoplankton Bloom Near Svalbard In Barents Sea, 2002 Image credit: Jacques Descloitres, MODIS Rapid Response Team, NASA/GSFC, <http://visibleearth.nasa.gov/view.php?id=61644>
p. 25 Norther lights over Svalbard, Photo by Marcela Cardenas, www.visitsvalbard.com
p. 28 Hotellneset, Svalbard, photo by Erlend Bjørtvedt, *modified, found at wikimeadia.org*
p. 29 *on top:* credits Store Norske, www.snsk.no
p. 29 *below:* photo by Simon le Roux 2009, *cropped*
p. 30 Satellite map, <http://toposvalbard.npolar.no/>
p. 31 Pyramiden mine, photo by Evzerikhin Emmanuil (b.1911), *private archive, Moscow*
p. 32 photos by Sergey Dolya 2015 <http://sergeydolya.livejournal.com/1076148.html>
p. 33 *on top:* Sandra van Egmond, <https://koudekust.com>
below by Sergey Dolya,2015 http://sergeydolya.livejournal.com/1076148.html
p. 34 S Satellite map, <http://toposvalbard.npolar.no/>
p. 37 photo from archive Alex Justas, *found at his personal blog www.fa-sharp.livejournal.com*
p. 37 Screenshot from the movie, 'The Ghost of Piramida', directed by Andreas Koefoed, original footages from private archive of Alexander Ivanovic Naomkin, www.theghostofpiramida.com
p. 38 photo by Wen Nang, www.flickr.com/photos/aliasgrace/49906278/
p. 40 photo by Sergey Dolya, *cropped*,2015 <http://sergeydolya.livejournal.com/1076148.html>
p. 41 *on top:* by Michelle van Dijk, spitsbergen-svalbard.info, *in the middle:* Caitlin Frankfish, 2013, <https://frankfishupnorth.wordpress.com/2013/10/16/nupamuða/>
below: photo courtesy: Sandra van Egmond <https://koudekust.com>
p. 42 photo courtesy: Elin Andreassen, Making A Home, 2006. from the publication "Persistent Memories. Pyramids - a Soviet Mining Town in the High Arctic "by Elin Andreassen, Hein B. Bjerck og Bjørnar Olsen. Tapir Academic Press, Trondheim 2010, *photos found at http://vimudeap.info/en/atlas/pyramiden-piramida-svalbard-spitzbergen/images/*
p. 43 *3 photos on top:* photo courtesy: Elin Andreassen, from Making A Home, 2006, *Ibid.*
p. 43 *below:* photo courtesy: Sandra van Egmond <https://koudekust.com>
p. 44 Photo by Sergey Dolya, *cropped*, 2015 <http://sergeydolya.livejournal.com>
p. 45 Photo by Pavel Boyarinov,*cropped http://boyarinoff.livejournal.com/4015.html*
p. 46 Screenshot from the movie, 'The Ghost of Piramida', directed by Andreas Koefoed, original footages from private archive of Alexander Ivanovic Naomkin, www.theghostofpiramida.com
p. 49 http://blsn.blox.pl/tagi_b/580328/Close-My-Way-feat-Joe-Dukie-Dusky-Remix-moderat-TNM-2014-kato-wice-galeria-szyb-wilson.html
p. 55 Photo courtesy: Rebecca Litchfield, <http://www.yellowtrace.com.au/stories-on-design-empty-and-abandoned-buildings/>
p. 59 Robert Wilson, The Life Death of Marina Abramovic, photo courtesy: Lucie Jansch http://www.desingel.be/dadetail.orb?da_id=23563
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p. 60 Photo courtesy Kevin Cooley, Arctic Clrle, www.arcticcircle.org
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p. 61 Photo from "The Ghost of Piramida", a film by Andreas Koefoed, www.theghostofpiramida.com
p. 62 Wathiq Al-Ameri and Ali Al Fatlawi, <http://www.arcticaction.info>
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LPO Arkitekter www.lpo.no, Brendeland & Kristoffersen architects, photo by David Grandorge, 2007, www.bkark.no/projects/svalbard-housing/
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